P 91/2/980

INDICES OF PREDATOR ABUNDANCE IN THE WESTERN UNITED STATES

1980

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Animal Damage Control Program, FWS, USDI
with the assistance of the Divisions of Refuges, Research, and
State and University Cooperators

Data Compiled by:
Pocatello Supply Depot

U.S. Department of the Interior
U.S. Fish and Wildlife Service
Pocatello Supply Depot
Pocatello, Idaho 83201

INDICES OF PREDATOR ABUNDANCE

IN THE WESTERN UNITED STATES

1980

Coordinated by
Jerry R. Bean
and
Robert D. Roughton

This is a progress report, not a formal publication. Statistical analysis and interpretation of the data are tentative and incomplete and are not for scientific publication.

ABSTRACT

Results of the ninth annual survey of relative predator abundance in the western United States are presented along with graphs depicting trends in coyote indices by states. The data are intended to reflect year-to-year changes in visitation indices for various predators, particularly coyotes, attracted to standardized scent-station lines. The method was not designed for estimation of the number of individuals per unit area for any predator species, differences in abundance between predator species inhabiting the same area, or differences in relative abundance of a single species in different areas. Conclusions and interpretations based on results from small groups of lines are inappropriate and statistically unsound.

Analysis of the last nine years of data (1972-1980) indicates that the overall coyote visitation index for the western United States increased 10% between 1972 and 1973, and again between 1973 and 1974. At a probability level (P) of 95% (5% risk of error) both changes were statistically significant. Between 1974 and 1975 it decreased 5% (P=80%), between 1975 and 1976 it decreased a further 7% (P=90%) and between 1976 and 1977 14% (P=99%). Between 1977 and 1978, the overall index increased 4% (P=50%). The low probability reflects a balance between sizable increases in some states and decreases in others. Comparing 1978 with 1979 an increase of 3% is seen (P=55%) while 1980 showed a decrease of 2% (P=44%). These recent results appear to represent a stable coyote trend in the west.

Two states showed changes in statewide coyote indices at or above the 95% level of probability often applied to biological data: Idaho (-42%), and Nebraska (+17%). Two other states showed changes, California (-16%, P=93%) and North Dakota (+54%, P=93%), at probability levels approaching significance. Among the remaining 16 states involved in the survey, 5 showed nonsignificant increases, 10 showed nonsignificant decreases, and 1 lacked 1979 data for comparison.

TABLE OF CONTENTS

ABSTRACT iii

INTRODUCTION 1

METHODS 2

RESULTS AND DISCUSSION 4

ACKNOWLEDGEMENTS 5

SURVEY LINE MAPS AND TABLES 15

Arizona 15

California 21

Colorado 27

Idaho 31

Illinois 35

Kansas 39

Minnesota 43

Montana 49

Nebraska 53

Nevada 57

New Mexico 61

North Dakota 67

Oklahoma 71

Oregon 75

South Dakota 79

Texas 83

Utah 91

Washington 95

Wisconsin 99

Wyoming 101

APPENDIX A: Field procedure instructions and observation forms .. 105

INTRODUCTION

This report contains the results of the ninth annual survey (1980) of relative predator abundance in the western United States. The major objective of the survey is to obtain data concerning the current distribution and status of certain predators, particularly the coyote, and to assess predator population trends. These data may also serve to detect coyote population responses, if any, to control efforts (or lack thereof), and relationships (if such exist) between the relative abundance of coyotes, predation on livestock, and livestock husbandry practices. In addition, the survey may provide a means of detecting simultaneous changes in other carnivore populations in the same areas. To date, such responses and changes could be interpreted only in a very general sense; survey method modifications are needed to permit interpretations precise enough to serve management needs.

The current methodology of this survey permits us to detect and apply statistical probabilities to apparent year-to-year changes in predator populations within broad areas only, such as entire states or regions. It is not intended as, and is not useful for, a census method, nor can the technique be employed to detect annual trends using small groups of standard survey lines. Therefore, "relative abundance," as used here, does not refer, except broadly, to difference in numbers of a given species in different locations (because of the myriad environmental variables that undoubtedly influence results of the survey), nor does the term refer to differences in numbers between cohabiting species (because the method employed does not uniformly survey all species involved).

Essentially, we are counting the number of visits[1/] by certain species attracted to standardized, artificial scent stations. Neither the number of individuals responsible for a given number of visits, nor the proportion of individuals of a species in an area visiting a scent-station line is known. Furthermore, we cannot delimit the land area surveyed by such lines, although we can speculate that this area varies greatly both between species (because of factors such as differential mobility, activity, sensory ability, social behavior, etc.) and within species (because of environmental variables such as food base, population density, physiography, weather, etc.).

Our belief that the survey is capable of measuring "relative abundance" rests on the assumption that the relationship between the visitation rate and the density of a given species is sufficiently consistent for the index to provide reliable and useful information. We are currently engaged in research to answer questions regarding the reliability and sensitivity of the survey method.

Such research has led to a number of recommendations for modifying the survey method to make it more sensitive to statewide changes and permit interpretation

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[1/] Even "visit" must be carefully defined: Since it is impossible, in many cases, to distinguish the number of individual animals leaving tracks at a scent station, a "visit" is a track(s) of one or more individuals of given species at a station. Hence, only one visit per species per scent station per night can be tallied.

of results for more localized areas. Subject to approval from our Washington office, some of these changes may be implemented after the tenth survey in 1981.

METHODS

The procedures employed in the survey (Appendix A) were the same as in 1979. Each survey line consisted of 50 scent stations located immediately adjacent to the edge of an unpaved road and 0.3 mile apart along a continous 14.7-mile route. In a few cases, it was necessary to interrupt the line for a short distance when continuous full-length routes were not available. Each scent station consisted of a 3-foot circle of sifted earth in the center of which was placed a small perforated plastic capsule supported approximately 0.5 to 1 inch above the surface by a small stick. Capsules were filled with about 1 gram of FAS attractant and were consecutively numbered. The stations were alternated between left and right sides of the roads to reduce the influence of prevailing winds. Capsules that were carried off or destroyed by animals, clogged with blowing dirt, or washed out by rain, were replaced daily as needed.

Weather permitting, scent-station lines were checked daily for 4 successive days and animal visits (based on tracks) were recorded. At stations visited or disturbed by larger mammals (carnivores, cows, deer, etc.), the ground was smoothed over each day so that new tracks could be distinguished on succeeding days. Since it was usually impossible, on the basis of track size, to ascertain if more than one carnivore (of the same species) visited a given station on a given day, observers were instructed to merely indicate "coyote visit," "red fox visit," "no visit," etc. It was also impossible to determine if individual animals visited two or more stations during any one 24-hour period (or successive 24-hour periods), or the frequency with which this occurred. Other data recorded for each survey line were daily weather conditions; stations destroyed by cows, human interference, or weather (rain, wind, etc.); topography, principal land uses; major vegetative characteristics; and a qualitative estimate of the degree of predator control activities, if conducted.

Indices of visitation by species were obtained for each survey line by totaling the number of stations visited by each species for the 4 nights. The total number of "scent-station nights" was derived by subtracting from a maximum of 200 station nights (50 stations x 4 nights) all of those that were inoperable because of weather, human interference, or animal interference (e.g., cows, etc.). In this context, an "inoperable" station was one for which predator tracks, if present, could not be distinguished. The index was calculated as follows for each species of interest:

$$\frac{\text{TOTAL NO. VISTS}}{\text{TOTAL NO. OPERABLE STATION NIGHTS}} \times 1{,}000 = \text{INDEX}$$

For example, a line with 30 coyote visits and 185 operable scent-station nights resulted in an index of 162 (30/185 x 1,000 = 162).

Tracks of the following carnivores were observed and recorded at scent stations: opossum; black bear; raccoon; ringtail; weasel; mink; badger; civet cat; skunk; red, kit, and gray fox; coyote; gray wolf; dog; mountain; lion; bobcat; and house cat. Tracks of armadillos and javelinas, were also tabulated. Because these survey lines were designed and positioned primarily for coyotes, use of the data to determine trends for other species, particularly non-canids, may be questionable as each species has characteristic movement patterns and habitat preferences.

Upon completion of field aspects of the survey, all data were sent to the Pocatello Supply Depot where they were edited according to rigorous prescribed standards, transcribed to punch cards, and subjected to a series of computer programs to verify, summarize and analyze the 1980 survey data and to estimate the probabilities associated with changes in the statewide coyote indices from 1979 to 1980.

In the probability computation the test statistic is a principal called Fisher's Method of Randomization. The essence of Fisher's idea is that any set of n observations may be regarded "as but one number of a whole family of distinguishably different sets of n observations having the same absolute magnitudes but differing with regard to algebraic signs, 'locations', or both. Within this family of distinguishably different sets of data will be a family of sets, all of which, if the null hypothesis and all assumptions are true, had the same a priori probability of being drawn as the obtained set" (Bradley 1968).

Assuming that if the values observed really come from the same population, then each observation can take the value of any other observation in the set. This is true whether you are comparing the means of indexes from two different areas or, as in this case, the means for each area at two points in time. By permuting the values in N! possible ways an <u>exact</u> probability can be calculated for the data. We have adapted a program to the computer at Utah State University and obtained the probabilities reported here.

If the reader wishes more information on Fisher's principle, refer to the literature list at the end of the Results and Discussion which follows.

RESULTS AND DISCUSSION

Statewide surveys were carried out in 18 states. In addition, two lines were run in Wisconsin and eight in Montana, but were not adequate for characterizing statewide predator trends.

Most lines were run by personnel of the U.S. Fish and Wildlife Service' Animal Damage Control program with assistance from the Division of Refuges, Research and extensive participation by university and state game department cooperators.

The 1980 survey was conducted at about the same time as in 1979, with most lines in operation during the target week beginning September 8th and a few within two weeks before or after the target week. Such synchronization is desirable to enhance the comparability of yearly results.

With some exceptions, survey lines run in 1979 were run again in 1980 and 10 new lines added. Of a total 531 that have been run between 1972 and 1980, 66 have been permanently deleted (due to road improvement, change of land ownership, lack of personnel in area, etc.), 50 were interrupted by weather and 51 were discontinued for other reasons. The remainder, a total of 361, was run successfully in 1980 (Figure 1), as compared to 325 in 1979, 370 in 1978, 408 in 1977, 412 in 1976, 393 in 1975, 367 in 1974, 354 in 1973 and 328 in 1972. As in prior years, with the exception of Montana and Wisconsin, approximately one line was run for each 5,000 square miles of land area within each state. The distribution of survey lines in 1979 is shown in Table 1.

Over a period of years, some lines are inevitably deleted and others added as replacements. Because valid comparisons of yearly results can be made only between groups of lines run each year, attrition and addition of lines reduces the basis for comparison. Therefore in this report, statewide yearly comparisons (Figure 2) are based on indices from only those lines run for both years in question and, as a result, 1980 statewide indices cannot be compared directly with 1972-1978 indices.

A statistical comparison for all states surveyed, of the nine years data in hand, indicates that overall coyote visitation rates, following small but significant increases in 1973 and 1974, decreased in 1975, 1976 and 1977, and did not change significantly in 1978, 1979 and 1980.

Statewide changes in coyote visitation rates (indices) between 1979 and 1980 varied from -42% to 219% but only two states showed change at or above the 95% probability level: Idaho(-42%, P=98%) and Nebraska (17%, P=95%). Two other states showed changes, California (-16%, P=93%) and North Dakota (54%, P=93%), at probability levels approaching significance. Five other states showed increases and ten decreased, but none at a significant level. The Montana and Wisconsin data have no statewide implication since there are not enough lines run every year in these states. Illinois has dramatically increased the number of lines during 1980 and should have significant comparative date in 1981.

Trends in coyote indices the past nine years are shown by state in Figure 3, with the final graph depicting the westwide trend. In each graph the vertical placement of the trend line was adjusted so that the mean of the yearly data points equals the grand mean (derived from all lines run in all years for each state), rather than using the statewide index for the initial year as the reference point. Year-to-year changes are based on percent changes for lines run in both years being compared. Because the overwhelming majority of these changes have less than statistically significant probabilities, these graphs should be interpreted with caution.

Figure 4 explains the derivation of the data in the computor printouts which tabulate the following:

1. Total operable scent station nights for each state
2. Total animal visits to scent stations, by line and state
3. Visitation indices, by species, for each line and state

An outline map indicating the approximate survey line locations and 1980 coyote indices precedes the computor printout for that state. On these maps, the symbol "DL" mean that the line has been permanently deleted, "RO" means rain or other weather conditions interrupted the successful completion of the lines, "NR" means the line was not run (usually because of personnel, funds, or gas shortages), and "ND" means that no data were received.

For the benefit of those not familiar with the field methods of the survey, a set of instructions and observation forms are included as appendix A.

ACKNOWLEDGEMENTS

Thanks are due to the many individuals from state game fish agencies, various universities, the Animal Damage Control program and the Divisions of Research and Refuges who participated in or helped to coordinate this survey. James A. Kniffen assisted greatly in material preparation and Lynda Hansen invaluable aid in text preparation.

Table 1. Distribution of predator survey lines in 20 states, 1980.

State	Square miles	Number of lines		State	Square miles	Number of lines	
		Established	Run			Established	Run
Arizona	113,909	42	27	New Mexico	121,666	33	13
California	153,693	38	30	North Dakota	70,665	19	15
Colorado	104,247	25	19	Oklahoma	69,919	18	16
Idaho	83,557	20	12	Oregon	86,981	25	20
Illinois	56,400	11	9	South Dakota	77,047	25	15
Kansas	82,276	24	21	Texas	267,339	62	36
Minnesota	84,068	38	31	Utah	84,916	20	18
Montana	147,138	33	8	Washington	68,192	18	11
Nebraska	77,227	29	24	Wisconsin	56,154	6	2
Nevada	110,540	22	15	Wyoming	97,914	23	19

Table 2. Trend in Coyote visitation rates, western United States. 1980.

Years	No. of Comparable lines[a]	Avg. index for comparable lines		Percent change	Probability[b]
		1st yr.	2nd yr.		
1972 vs 1973	316	107	118	+10	95%
1973 vs 1974	335	116	127	+10	95%
1974 vs 1975	334	127	120	- 5	80%
1975 vs 1976	354	129	120	- 7	90%
1976 vs 1977	363	115	99	-14	99%
1977 vs 1978	335	104	109	+ 4	50%
1978 vs 1979	325	105	108	+ 3	55%
1979 vs 1980	302	111	109	- 2	44%

[a]Comparable lines are those lines run in each of the two years being compared

[b]Probability that the observed difference represents an actual change in the index.

Literature List

Bradley, N.F. 1968. Distribution-free statistical tests. Prentice-Hall, Englewood Cliffs, N.J., pp. 68-86.

Conover, W.J. 1971. Practical nonparametric statistics. tests of location. Amer. Stat. 31 (1):37-39.

Green, B.F. 1977. A practical interactive program for randomization tests of location. Amer. Stat. 31 (1):37-39.

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Figure 1. Location of predator survey lines, 1980

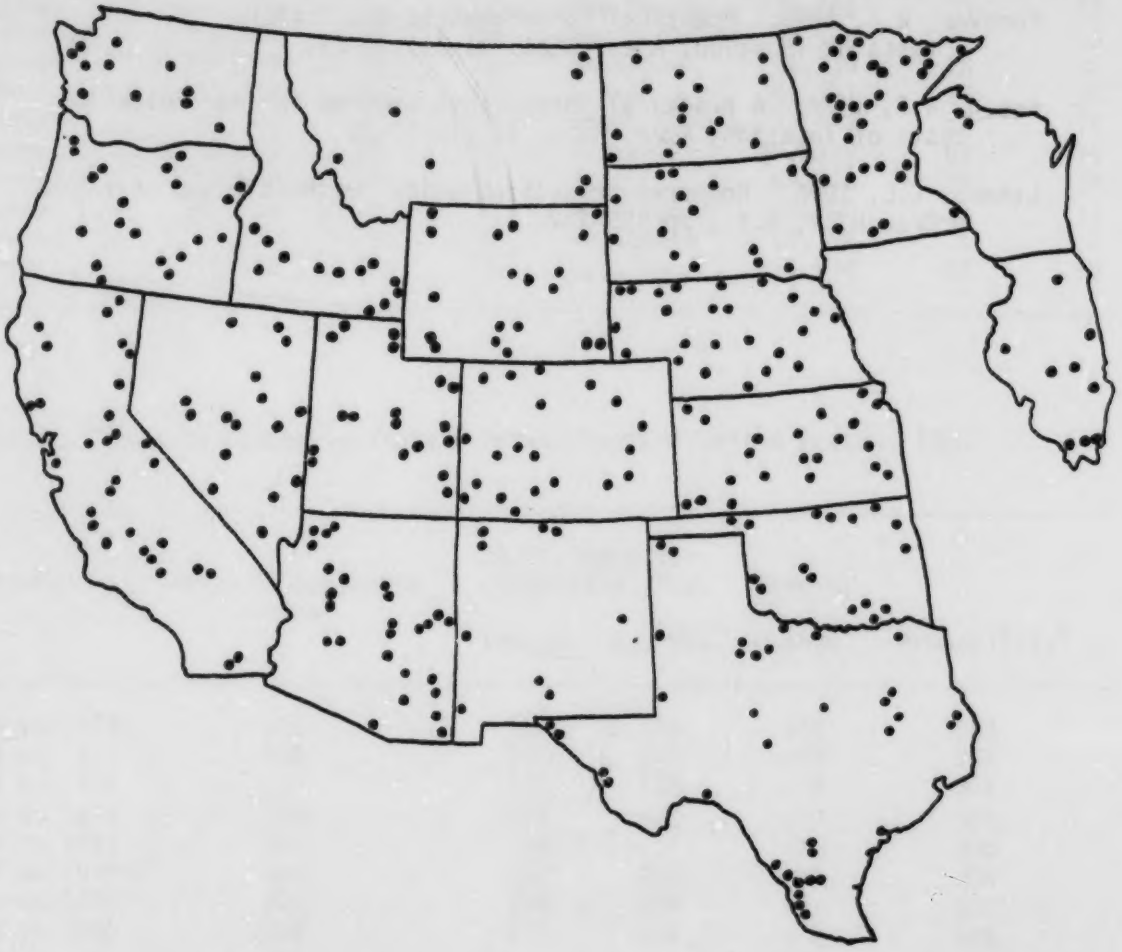
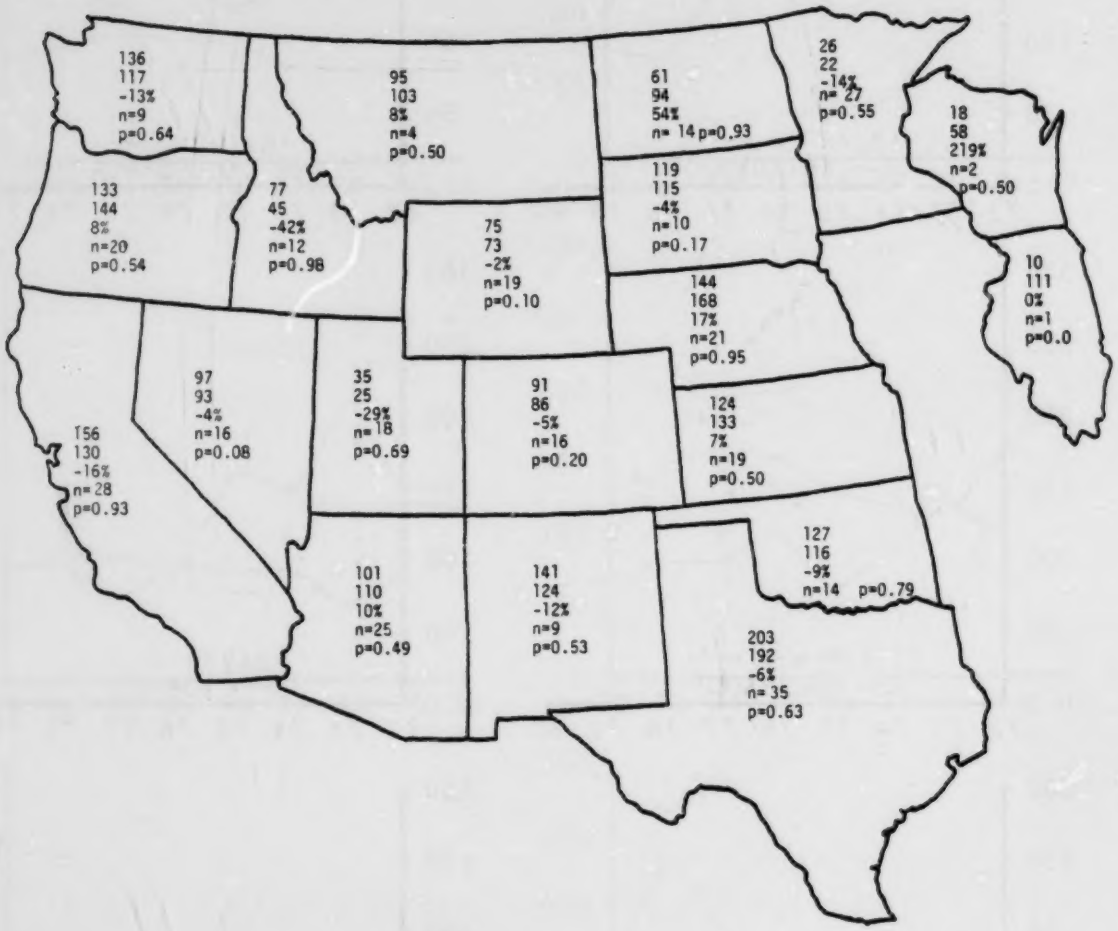


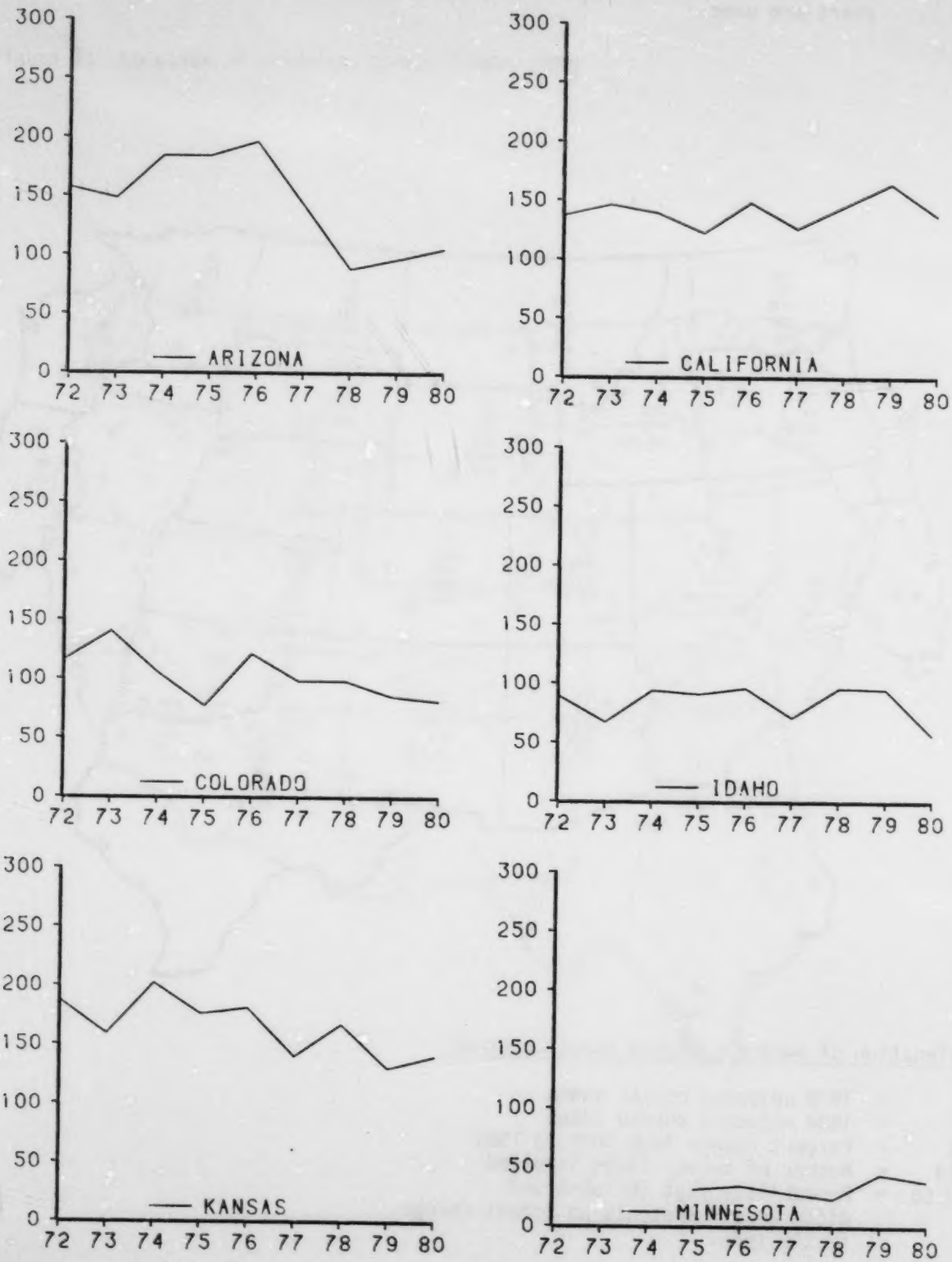
Figure 2. Comparison of 1979 and 1980 adjusted statewide coyote visitation indices. Only lines with data from both years are used.



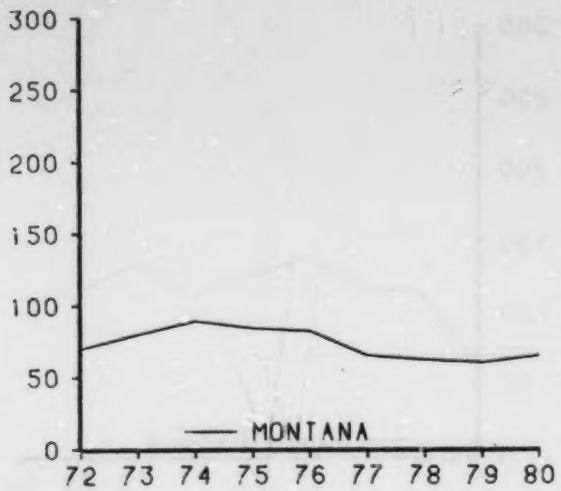
Explanation of numerals within state outlines:

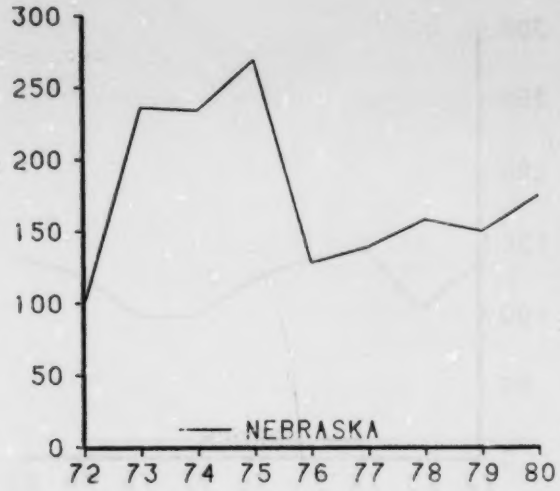
61 = 1979 adjusted coyote index
94 = 1980 adjusted coyote index
54% = Percent change from 1979 to 1980
n=13 = Number of survey lines involved
P=0.50 = Probability that the observed difference represents an actual change in the index

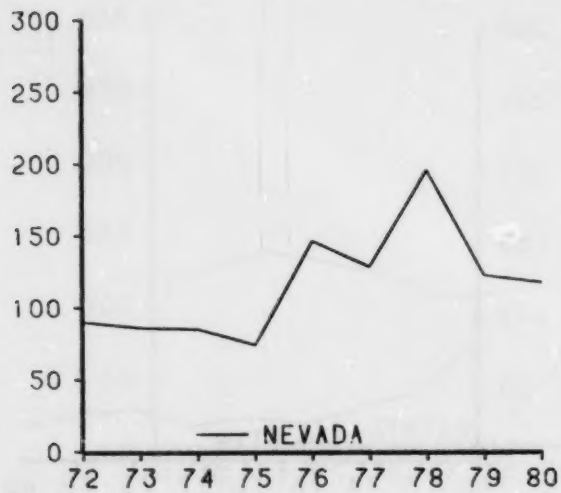
Figure 3. Trends in statewide coyote indices, 1972-1980

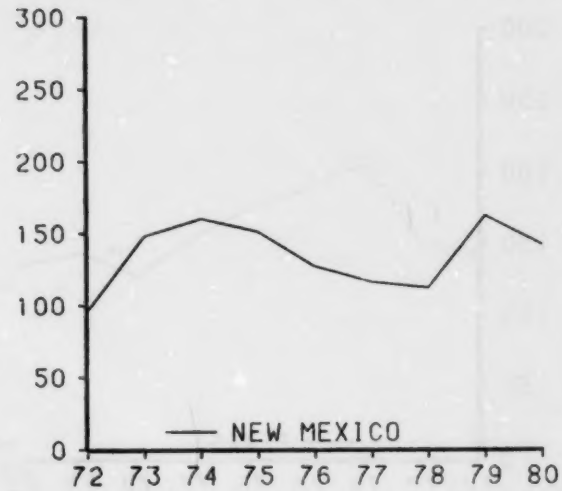


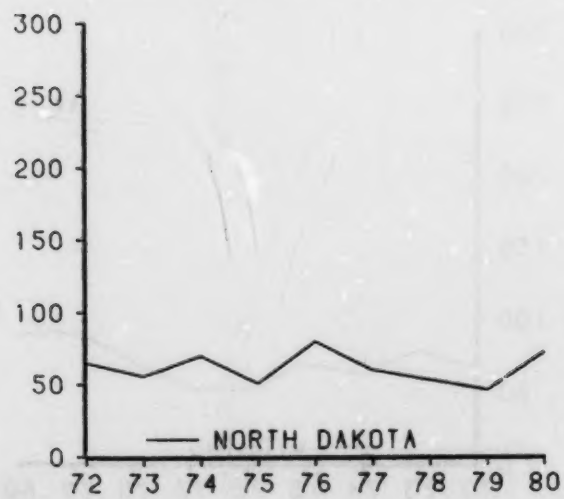
igure 3. Trends in statewide coyote indices, 1972-1980 (continued).











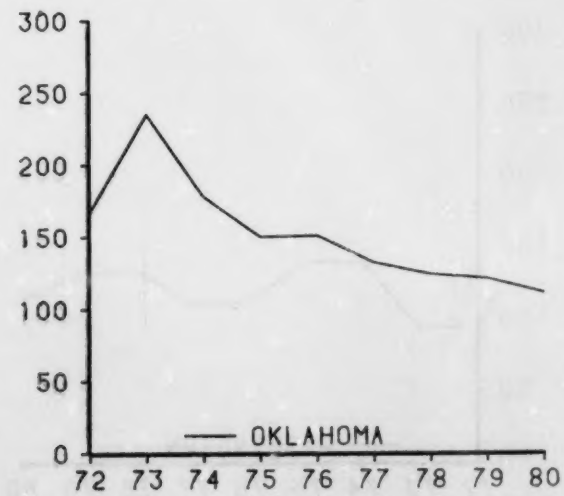
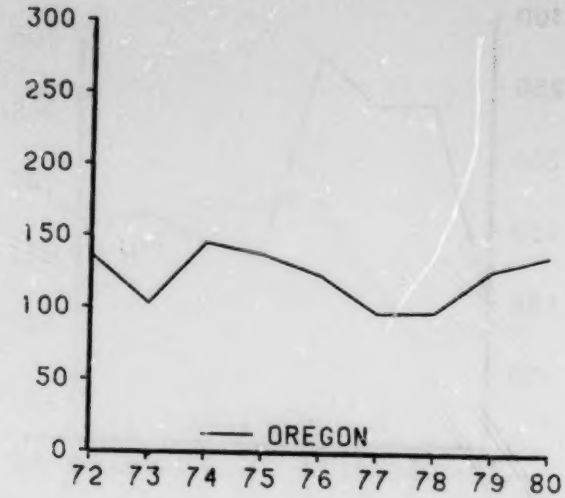
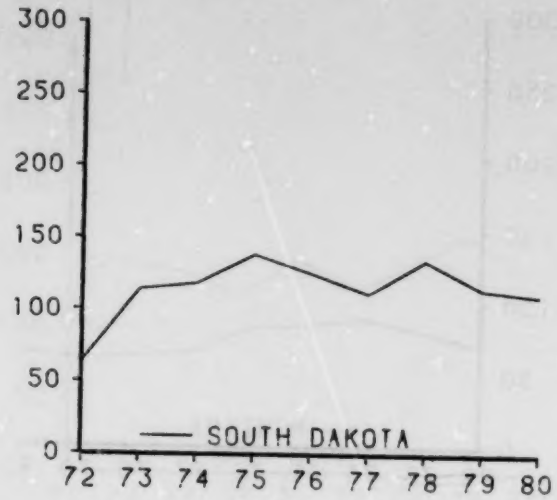
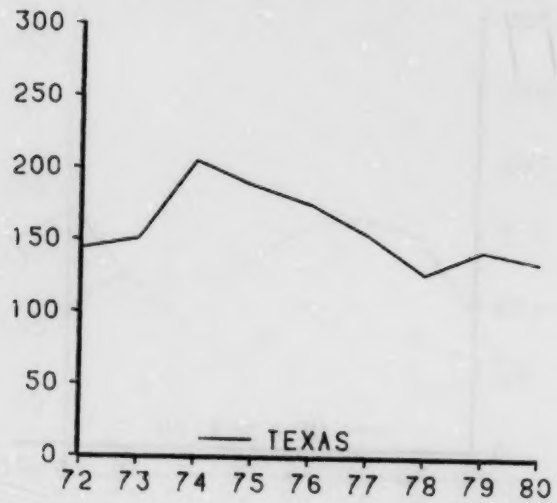
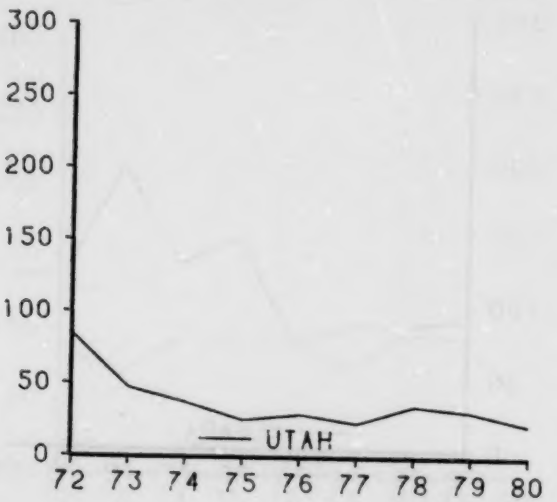


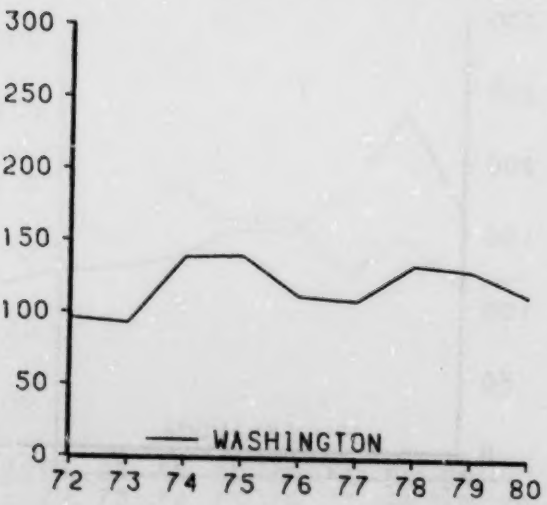
Figure 3. Trends in statewide coyote indices, 1972-1980 (continued).











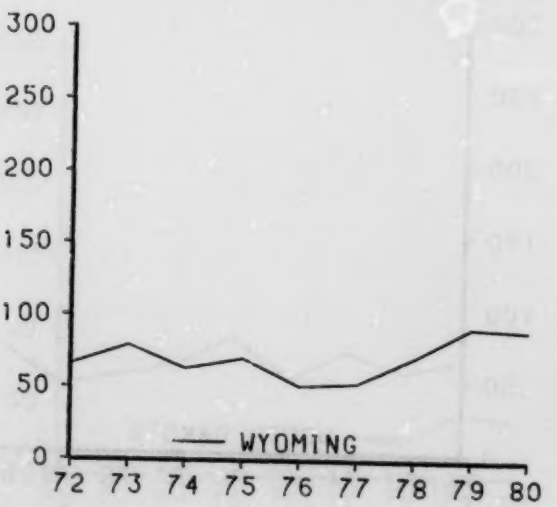


Figure 3. Trends in statewide coyote indices, 1972-1980 (concluded).

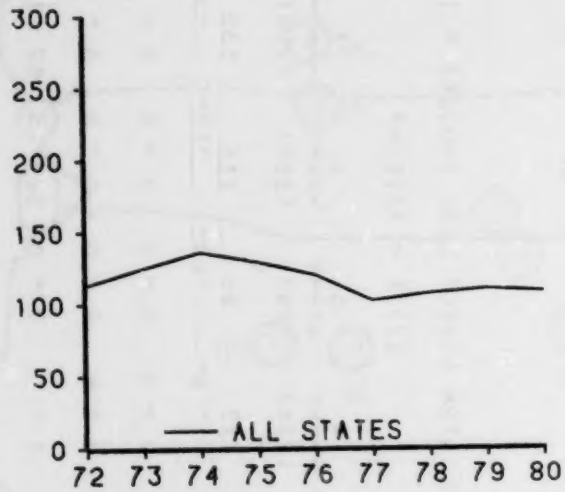
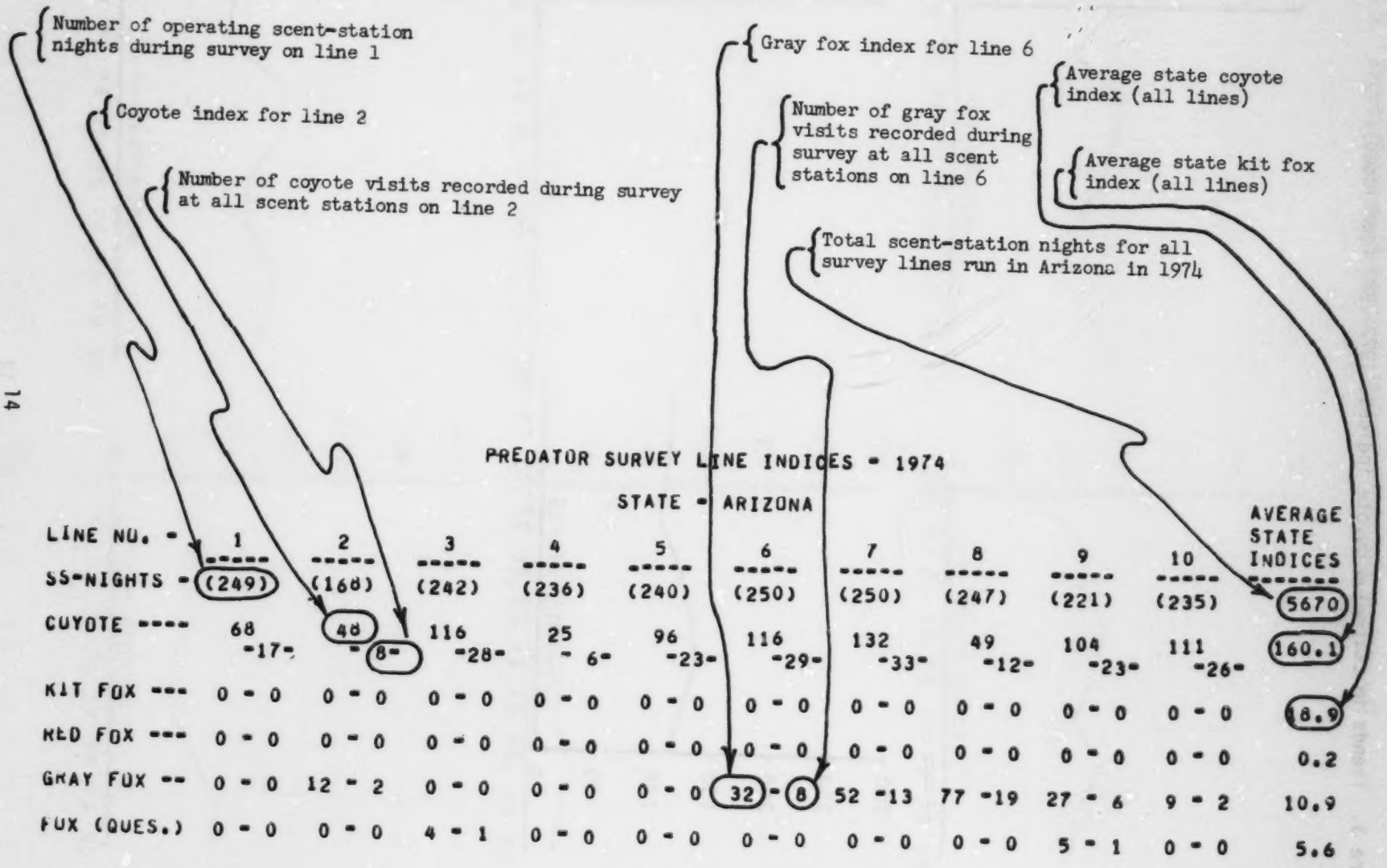
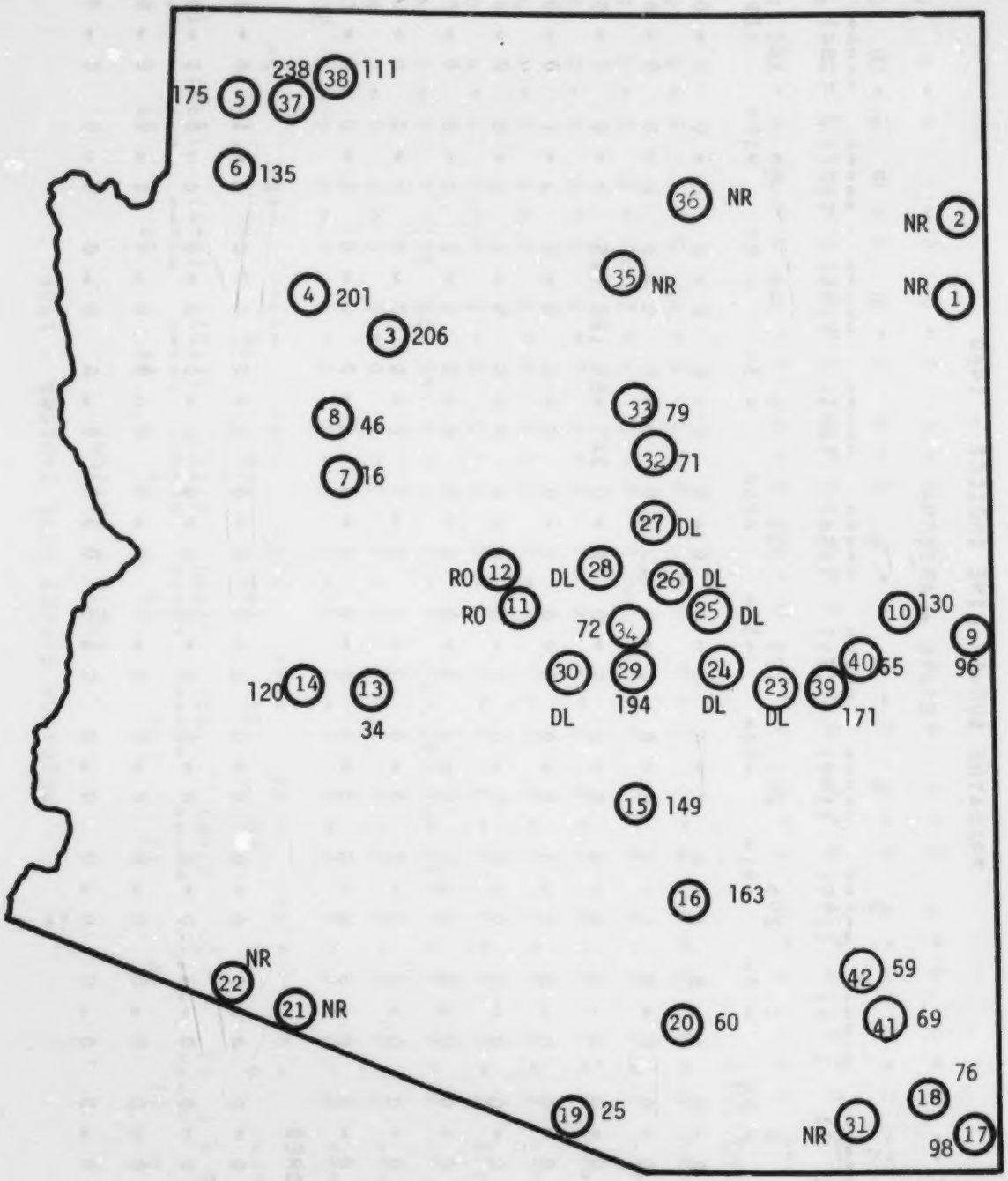


Figure 4. Explanation of computer printout summarizing data from survey lines run in each state.


Number of operating scent-station nights during survey on line 1
Coyote index for line 2
Number of coyote visits recorded during survey at all scent stations on line 2
Gray fox index for line 6
Number of gray fox visits recorded during survey at all scent stations on line 6
Average state coyote index (all lines)
Average state kit fox index (all lines)
Total scent-station nights for all survey lines run in Arizona in 1974
PREDATOR SURVEY LINE INDICES - 1974
STATE - ARIZONA
LINE NO. - 1 2 3 4 5 6 7 8 9 10 AVERAGE STATE INDICES
SS-NIGHTS - (249) (168) (242) (236) (240) (250) (250) (247) (221) (235) 5670
COYOTE ---- 68 -17- 48 - 8- 116 -28- 25 - 6- 96 -23- 116 -29- 132 -33- 49 -12- 104 -23- 111 -26- 160.1
KIT FOX --- 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 18.9
RED FOX --- 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 0.2
GRAY FOX -- 0 - 0 12 - 2 0 - 0 0 - 0 0 - 0 32 - 8 52 -13 77 -19 27 - 6 9 - 2 10.9
FOX (QUES.) 0 - 0 0 - 0 4 - 1 0 - 0 0 - 0 0 - 0 0 - 0 0 - 0 5 - 1 0 - 0 5.6

ARIZONA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175 5 37
6 135
36 NR
NR 2
35 NR
NR 1
4 201
3 206
33 79
8 46
32 71
7 16
27 DL
RO 12 DL 28 26 DL
RO 11 25 DL
10 130
72 34
9 96
120 14 13 34
30 29 24 23 39 40 65
DL 194 DL DL 171
15 149
16 163
NR 22
21 NR
42 59
20 60
41 69
76
18
19 25
NR 31
98 17

PREDATOR SURVEY LINE INDICES - 1980

STATE - ARIZONA

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(0)	(0)	(199)	(199)	(171)	(156)	(193)	(195)	(177)	(184)	4592
COYOTE ----	0 - 0	0 - 0	206 -41	201 -40	175 -30	135 -21	16 - 3	46 - 9	96 -17	130 -24	110.8
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.8
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	301 -58	128 -25	0 - 0	0 - 0	62.3
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	6 - 1	0 - 0	3.0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	2.2
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.4
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.3
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.7
OTHER CARNIVORES											
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	6 - 1	0 - 0	0.7
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.1
RINGTAIL --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.4
JAVELINA --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.0

PREDATOR SURVEY LINE INDICES - 1980

STATE - ARIZONA

LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(0)	(0)	(148)	(150)	(188)	(172)	(193)	(198)	(197)	(199)
COYOTE ----	0 - 0	0 - 0	34 - 5	120 -18	149 -28	163 -28	98 -19	76 -15	25 - 5	60 -12
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	20 - 4
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	635 -94	147 -22	0 - 0	0 - 0	145 -28	30 - 6	0 - 0	5 - 1
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1
BADGER ----	0 - 0	0 - 0	0 - 0	7 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	10 - 2	0 - 0	0 - 0
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0
OTHER CARNIVORES										
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	5 - 1	5 - 1
RINGTAIL --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0
JAVELINA --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - ARIZONA

LINE NO. -	21	22	23	24	25	26	27	28	29	30
SS-NIGHTS -	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(170)	(0)
COYOTE ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	194 -33-	0 - 0
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	76 -13	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	6 - 1	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	41 - 7	0 - 0
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	6 - 1	0 - 0
OTHER CARNIVORES										
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	12 - 2	0 - 0
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RINGTAIL --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	24 - 4	0 - 0
JAVELINA --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	41 - 7	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - ARIZONA

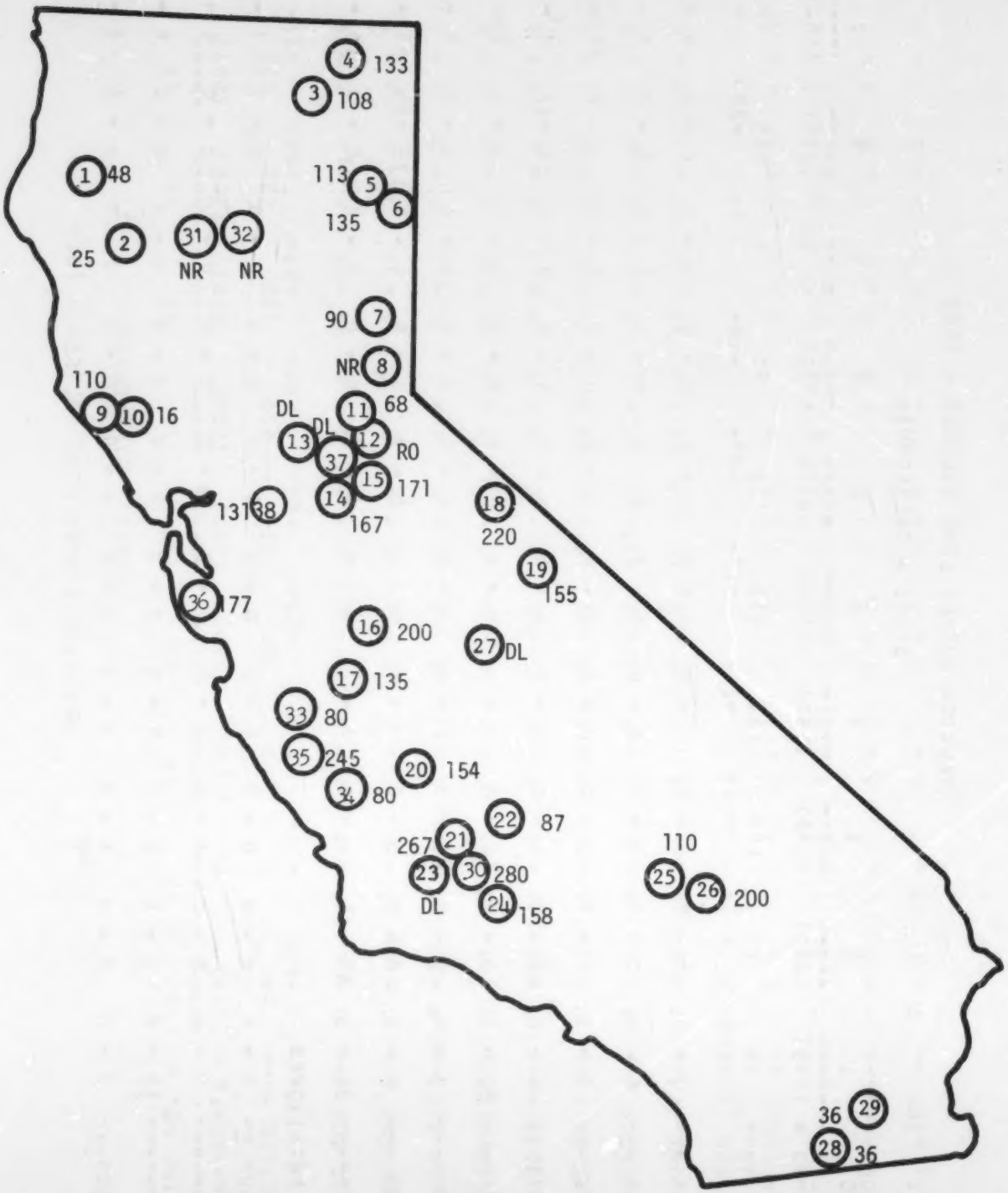
LINE NO. -	31	32	33	34	35	36	37	38	39	40
SS-NIGHTS -	(0)	(183)	(114)	(166)	(0)	(0)	(193)	(190)	(164)	(200)
COYOTE ----	0 - 0	71 -13	79 - 9	72 -12	0 - 0	0 - 0	238 -46	111 -21	171 -28	65 -13
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	18 - 3	0 - 0	0 - 0	0 - 0	0 - 0	128 -21	75 -15
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	62 -12	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	6 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BADGER ----	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
SKUNK -----	0 - 0	0 - 0	0 - 0	24 - 4	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1
OTHER CARNIVORES										
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	6 - 1	5 - 1
RINGTAIL --	0 - 0	0 - 0	0 - 0	36 - 6	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
JAVELINA --	0 - 0	0 - 0	0 - 0	6 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - ARIZONA

LINE NO. -	41	42								
SS-NIGHTS -	(174)	(119)	(							
COYOTE	69 -12-	59 - 7-	-							
KIT FOX	52 - 9	0 - 0								
RED FOX	0 - 0	0 - 0								
GRAY FOX	0 - 0	0 - 0								
UNIDENTIFIE	0 - 0	0 - 0								
BOBCAT	0 - 0	0 - 0								
BADGER	0 - 0	0 - 0								
RACCOON	23 - 4	0 - 0								
SKUNK	6 - 1	0 - 0								
OTHER CARNIVORES										
BEAR	0 - 0	0 - 0								
DOG	0 - 0	0 - 0								
RINGTAIL	0 - 0	0 - 0								
JAVELINA	0 - 0	8 - 1								

CALIFORNIA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3 108
1 48
113
5
6
135
2
25
31
NR
32
NR
90 7
NR 8
110
9
10
16
DL
11
68
DL
13
12
RO
37
15
171
14
167
131
38
18
220
19
155
36
177
16
200
27
DL
17
135
33
80
35
245
20
154
34
80
22
87
267
21
110
23
30
280
25
26
200
DL
24
158
36
29
28
36

PREDATOR SURVEY LINE INDICES - 1980

STATE - CALIFORNIA

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(145)	(200)	(148)	(150)	(150)	(200)	(200)	(0)	(200)	(184)	5532
COYOTE ----	48 - 7-	25 - 5-	108 -16-	133 -20-	113 -17-	135 -27-	90 -18-	0 - 0-	110 -22-	16 - 3-	132.9
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	37.2
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	43 - 8	18.6
UNIDENTIFIE	0 - 0	60 -12	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	55 -11	0 - 0	4.5
BOBCAT ----	21 - 3	0 - 0	14 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	9.4
BADGER ----	0 - 0	0 - 0	20 - 3	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	3.3
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	175 -35	65 -12	14.3
SKUNK -----	21 - 3	55 -11	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	16 - 3	19.9
OTHER CARNIVORES											
OPPOSSUM --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	3.1
BEAR ------	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.2
DOG -------	14 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	4.2
MT. LION --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.1

PREDATOR SURVEY LINE INDICES - 1980

STATE - CALIFORNIA

LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(148)	(0)	(0)	(150)	(140)	(200)	(200)	(200)	(200)	(195)
COYOTE ----	68 -10-	0 - 0-	0 - 0-	167 -25-	171 -24-	200 -40-	135 -27-	220 -44-	155 -31-	154 -30-
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	90 -18	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --209 -31		0 - 0	0 - 0	13 - 2	36 - 5	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	5 - 1	10 - 2	5 - 1
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	35 - 7	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	0 - 0	0 - 0	0 - 0	13 - 2	93 -13	0 - 0	0 - 0	0 - 0	0 - 0	15 - 3
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	71 -10	45 - 9	30 - 6	95 -19	0 - 0	21 - 4
OTHER CARNIVORES										
OPPOSSUM --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
DOG -------	14 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
MT. LION --	7 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	15 - 3	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

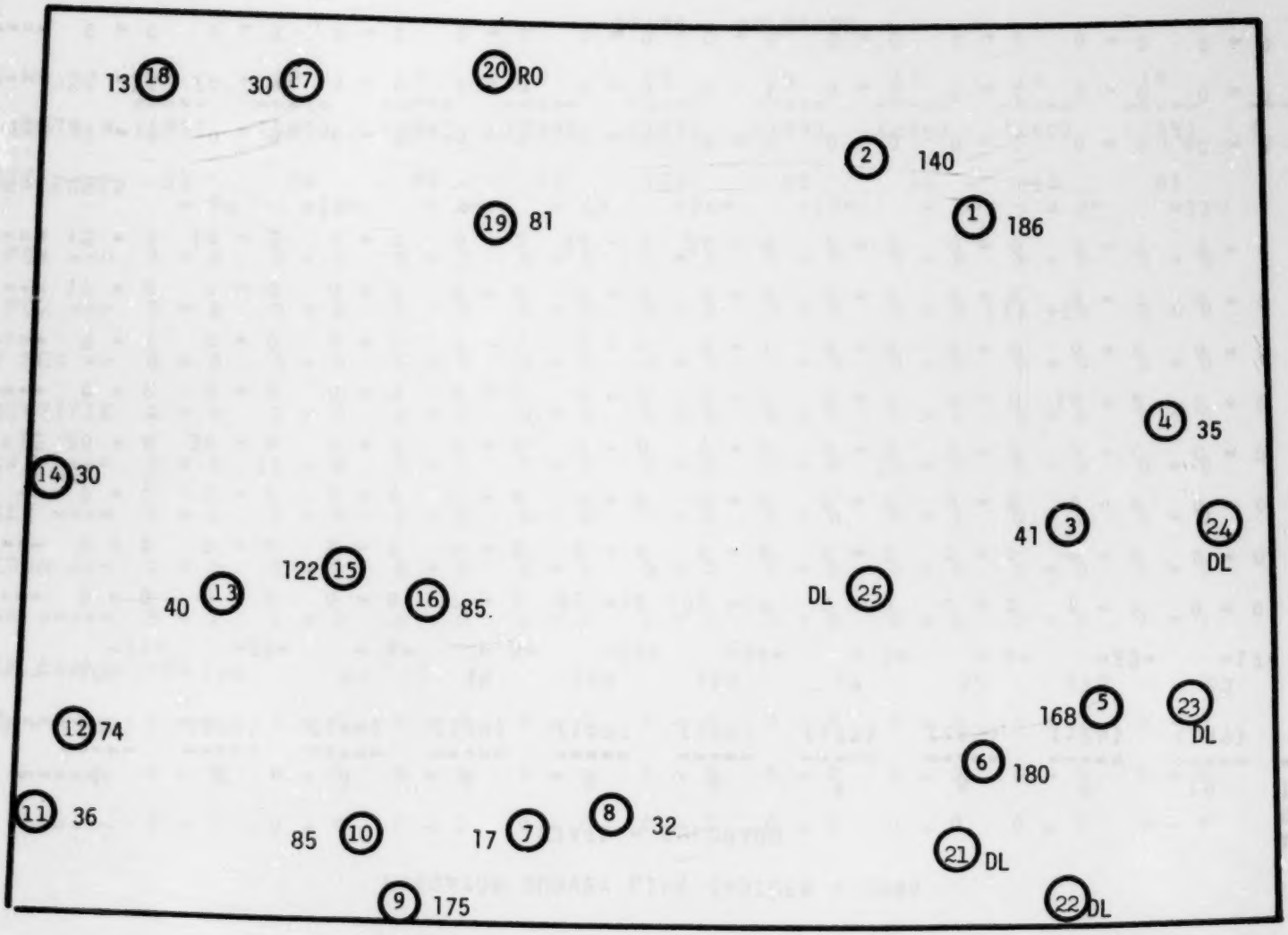
STATE - CALIFORNIA

LINE NO. -	21	22	23	24	25	26	27	28	29	30
SS-NIGHTS -	(195)	(195)	(0)	(196)	(200)	(200)	(0)	(165)	(193)	(189)
COYOTE ----	267 -52-	87 -17-	0 - 0-	158 -31-	110 -22-	200 -40-	0 - 0-	36 - 6-	36 - 7-	280 -53-
KIT FOX ---	26 - 5	379 -74	0 - 0	0 - 0	260 -52	260 -52	0 - 0	0 - 0	0 - 0	26 - 5
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	61 -12	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	82 -16	0 - 0	0 - 0	0 - 0	36 - 6	5 - 1	21 - 4
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	15 - 3	5 - 1	0 - 0	0 - 0	5 - 1	11 - 2
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	31 - 6	0 - 0
SKUNK -----	21 - 4	21 - 4	0 - 0	15 - 3	0 - 0	0 - 0	0 - 0	12 - 2	41 - 8	5 - 1
OTHER CARNIVORES										
OPPOSSUM --	21 - 4	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
DOG -------	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	73 -12	16 - 3	16 - 3
MT. LION --	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - CALIFORNIA

LINE NO. -	31	32	33	34	35	36	37	38		
SS-NIGHTS -	(0)	(0)	(200)	(200)	(200)	(198)	(0)	(191)	(	
COYOTE ----	0 - 0	0 - 0	80 -16	80 -16	245 -49	177 -35	0 - 0	131 -25	-	
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0		
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0		
GRAY FOX --	0 - 0	0 - 0	140 -28	45 - 9	40 - 8	0 - 0	0 - 0	0 - 0		
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0		
BOBCAT ----	0 - 0	0 - 0	20 - 4	20 - 4	15 - 3	20 - 4	0 - 0	0 - 0		
BADGER ----	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0		
RACCOON ---	0 - 0	0 - 0	5 - 1	15 - 3	15 - 3	5 - 1	0 - 0	0 - 0		
SKUNK -----	0 - 0	0 - 0	40 - 8	60 -12	15 - 3	0 - 0	0 - 0	0 - 0		
OTHER CARNIVORES										
OPPOSSUM --	0 - 0	0 - 0	40 - 8	20 - 4	5 - 1	0 - 0	0 - 0	0 - 0		
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0		
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0		
MT. LION --	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0		


13 18
30 17
20 RO
2 140
19 81
1 186
4 35
14 30
41 3
24 DL
122 15
40 13
16 85.
DL 25
168 5
23 DL
12 74
6 180
11 36
85 10
17 7
8 32
21 DL
9 175
22 DL

PREDATOR SURVEY LINE INDICES - 1980

STATE - COLORADO

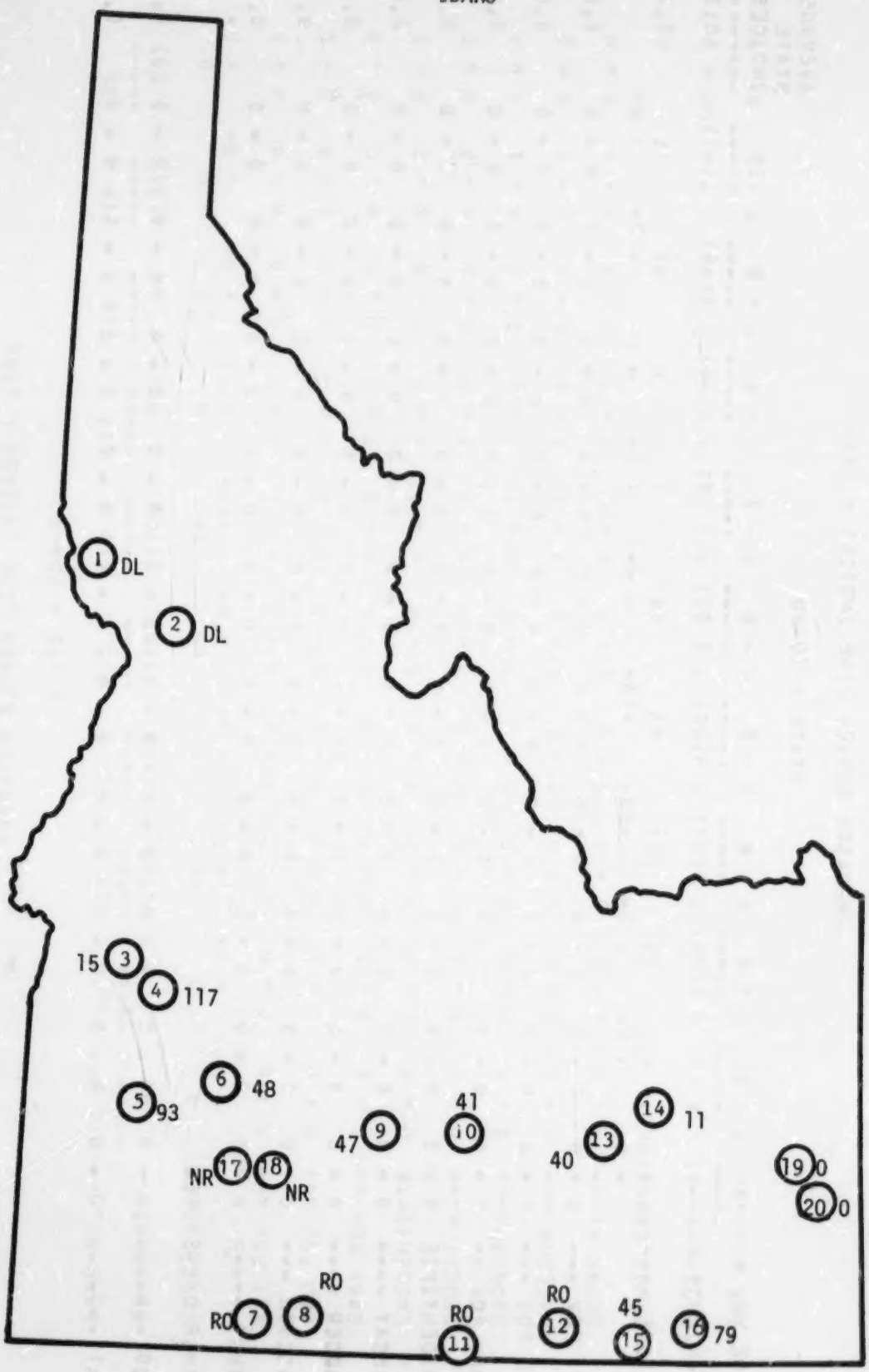
LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(199)	(200)	(146)	(144)	(149)	(189)	(177)	(185)	(126)	(199)	3381
COYOTE ----	186 -37-	140 -28-	41 - 6-	35 - 5-	168 -25-	180 -34-	17 - 3-	32 - 6-	175 -22-	85 -17-	82.2
KIT FOX ---	0 - 0	0 - 0	0 - 0	7 - 1	81 -12	101 -19	0 - 0	0 - 0	0 - 0	0 - 0	9.5
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5.9
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
UNIDENTIFIE	20 - 4	30 - 6	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	3.0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	16 - 2	0 - 0	2.4
BADGER ----	5 - 1	0 - 0	0 - 0	7 - 1	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	1.2
RACCOON ---	10 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.6
SKUNK -----	15 - 3	10 - 2	0 - 0	0 - 0	34 - 5	26 - 5	0 - 0	0 - 0	0 - 0	0 - 0	5.0
OTHER CARNIVORES											
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	40 - 8	2.4
DOG -------	50 -10	20 - 4	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	5 - 1	0 - 0	0 - 0	4.7
CAT -------	0 - 0	0 - 0	7 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.3

PREDATOR SURVEY LINE INDICES - 1980

STATE - COLORADO

LINE NO. -	11	12	13	14	15	16	17	18	19	
SS-NIGHTS -	(197)	(189)	(200)	(200)	(197)	(199)	(200)	(150)	(135)	(
COYOTE ----	36 - 7-	74 -14-	40 - 8-	30 - 6-	122 -24-	85 -17-	30 - 6-	13 - 2-	81 -11-	-
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	133 -20	0 - 0	
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
BOBCAT ----	0 - 0	11 - 2	5 - 1	0 - 0	0 - 0	0 - 0	15 - 3	0 - 0	0 - 0	
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
SKUNK -----	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	7 - 1	
OTHER CARNIVORES										
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	

IDAHO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6 48
5 93
47 9
41 10
14 11
40 13
19 0
20 0
NR 17
18 NR
RO
RO 7
8
RO 11
RO 12
45 15
16 79

PREDATOR SURVEY LINE INDICES - 1980

STATE - IDAHO

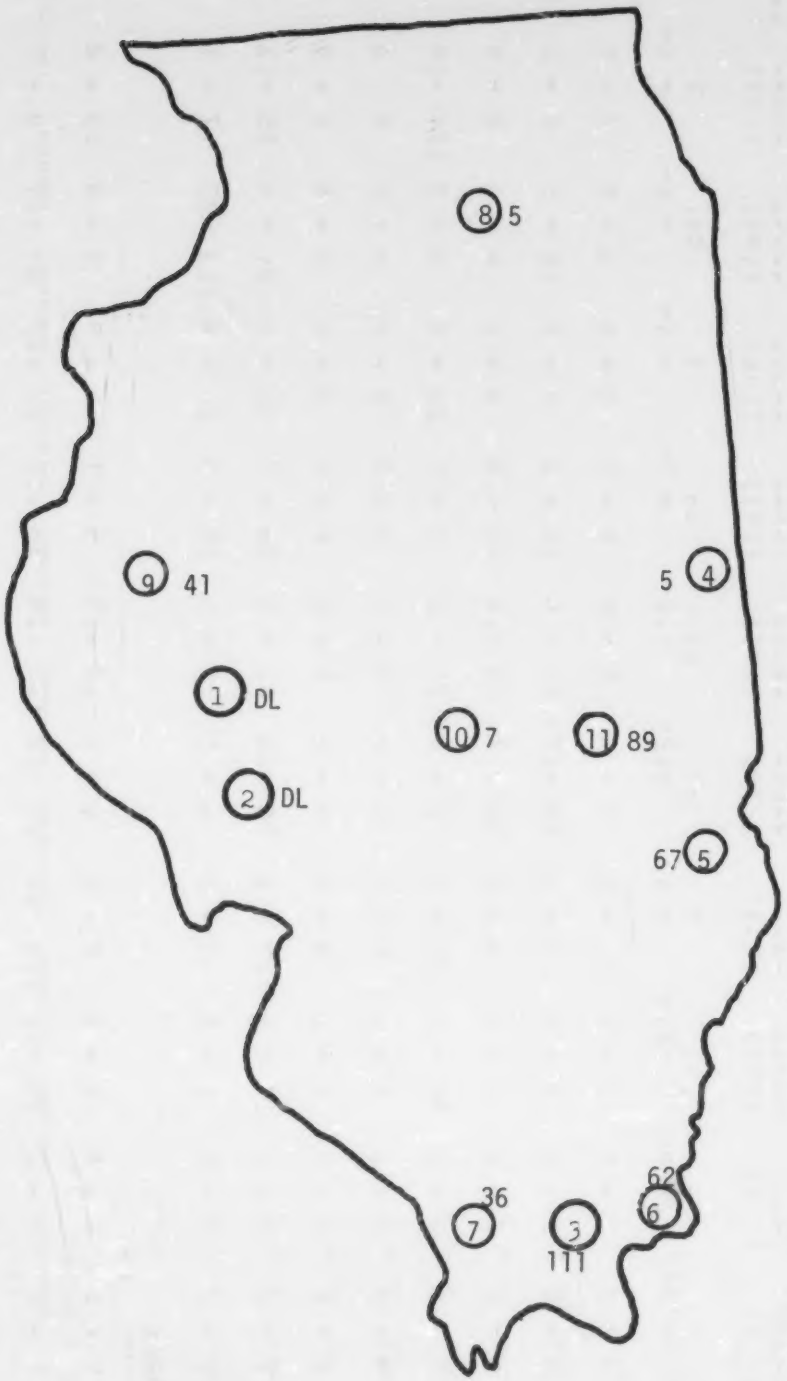
LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(0)	(0)	(198)	(197)	(140)	(83)	(0)	(0)	(148)	(147)	1813
COYOTE ----	0 - 0 -	0 - 0 -	15 - 3 -	117 - 23 -	93 - 13 -	48 - 4 -	0 - 0 -	0 - 0 -	47 - 7 -	41 - 6 -	47.4
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.8
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	14 - 2	0 - 0	0 - 0	0 - 0	14 - 2	0 - 0	2.8
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
OTHER CARNIVORES											
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.2
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.6

PREDATOR SURVEY LINE INDICES - 1980

STATE - IDAHO

LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(0)	(0)	(150)	(183)	(178)	(178)	(0)	(0)	(131)	(80)
COYOTE ----	0 - 0	0 - 0	40 - 6	11 - 2	45 - 8	79 - 14	0 - 0	0 - 0	0 - 0	0 - 0
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	27 - 4	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	8 - 1	0 - 0
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
OTHER CARNIVORES										
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	50 - 4
CAT -------	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

ILLINOIS



PREDATOR SURVEY LINE INDICES - 1980

STATE - ILLINOIS

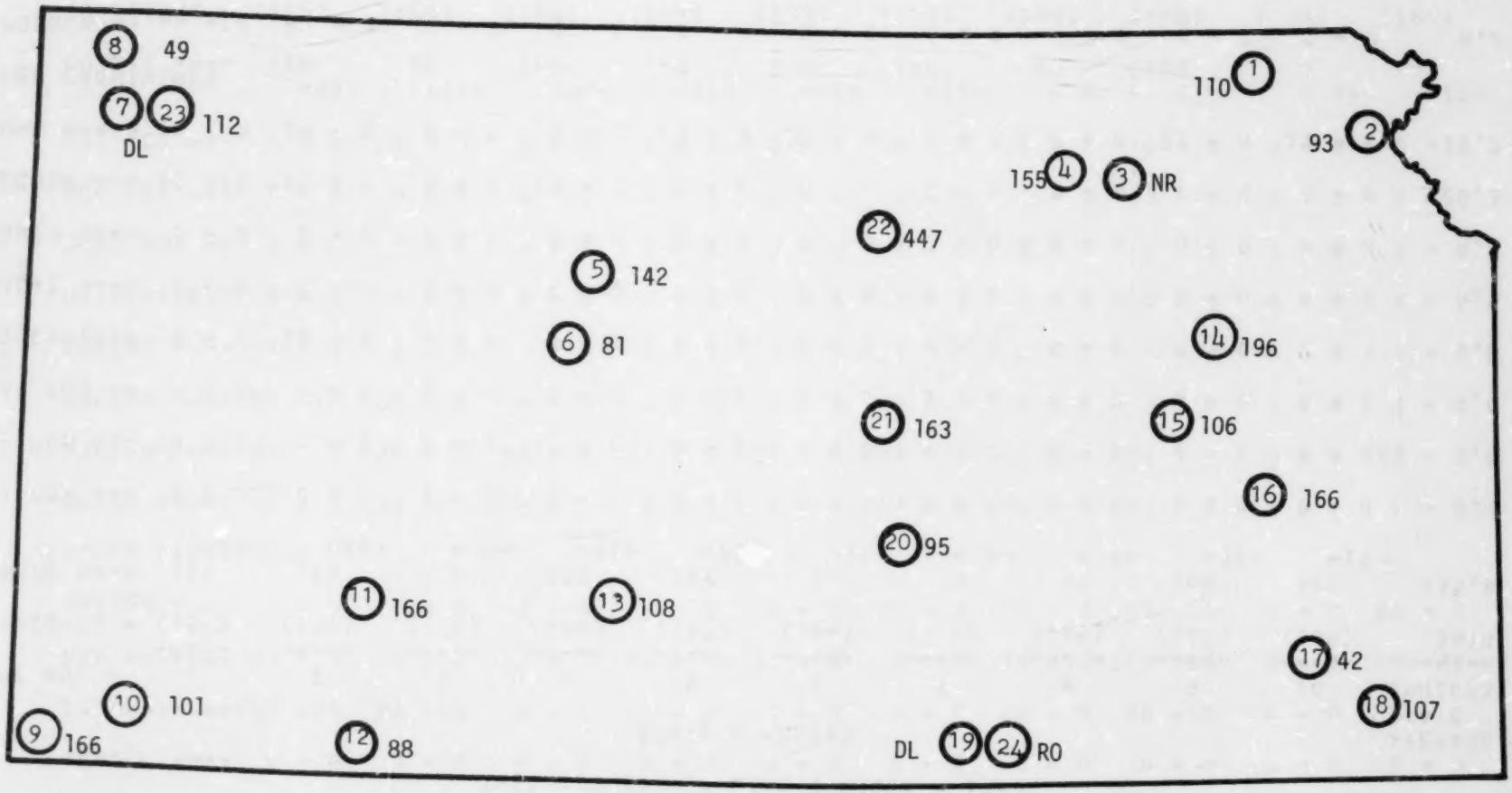
LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(0)	(0)	(190)	(193)	(179)	(195)	(197)	(196)	(195)	(153)	1677
COYOTE ----	0 - 0	0 - 0	111 -21	5 - 1	67 -12	62 -12	36 - 7	5 - 1	41 - 8	7 - 1	47.1
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	95 -17	46 - 9	10 - 2	0 - 0	15 - 3	0 - 0	19.1
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	39 - 7	72 -14	25 - 5	0 - 0	0 - 0	0 - 0	15.5
UNIDENTIFIE	0 - 0	0 - 0	95 -18	21 - 4	0 - 0	21 - 4	0 - 0	20 - 4	0 - 0	124 -19	29.2
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
RACCOON ---	0 - 0	0 - 0	21 - 4	10 - 2	78 -14	41 - 8	36 - 7	46 - 9	21 - 4	85 -13	45.3
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	15 - 3	20 - 4	113 -22	7 - 1	18.5
OTHER CARNIVORES											
OPPOSSUM --	0 - 0	0 - 0	11 - 2	0 - 0	6 - 1	62 -12	5 - 1	0 - 0	0 - 0	13 - 2	10.7
DOG -------	0 - 0	0 - 0	95 -18	114 -22	67 -12	133 -26	56 -11	87 -17	87 -17	0 - 0	99.0
CAT -------	0 - 0	0 - 0	32 - 6	0 - 0	73 -13	10 - 2	10 - 2	66 -13	10 - 2	0 - 0	35.8
MINK ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0.6

PREDATOR SURVEY LINE INDICES - 1980

STATE - ILLINOIS

LINE NO. -	11									
SS-NIGHTS -	(179)	(								
COYOTE ----	89									
	-16-	-								
KIT FOX ---	0 - 0									
RED FOX ---	6 - 1									
GRAY FOX --	0 - 0									
UNIDENTIFIE	0 - 0									
BOBCAT ----	0 - 0									
BADGER ----	0 - 0									
RACCOON ---	84 -15									
SKUNK -----	0 - 0									
OTHER CARNIVORES										
OPPOSSUM --	0 - 0									
DOG --------	240 -43									
CAT --------	123 -22									
MINK ------	0 - 0									

KANSAS


8 49
7 23 112
DL
1 110
2 93
155 4 3 NR
22 447
5 142
6 81
14 196
21 163
15 106
16 166
20 95
11 166
13 108
17 42
18 107
10 101
9 166
12 88
DL 19 24 RO

PREDATOR SURVEY LINE INDICES - 1980

STATE - KANSAS

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(182)	(172)	(0)	(200)	(197)	(186)	(0)	(185)	(187)	(189)	3679
COYOTE ----	110 -20-	93 -16-	0 - 0-	155 -31-	142 -28-	81 -15-	0 - 0-	49 - 9-	166 -31-	101 -19-	135.4
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.3
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	3.0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
UNIDENTIFIE	5 - 1	12 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.8
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.5
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	4.6
RACCOON ---	60 -11	41 - 7	0 - 0	15 - 3	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	28.3
SKUNK -----	16 - 3	29 - 5	0 - 0	5 - 1	15 - 3	32 - 6	0 - 0	0 - 0	21 - 4	11 - 2	13.3
OTHER CARNIVORES											
OPPOSSUM --	66 -12	23 - 4	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	8.2
DOG -------	82 -15	122 -21	0 - 0	80 -16	30 - 6	27 - 5	0 - 0	5 - 1	0 - 0	16 - 3	45.1
CAT -------	11 - 2	17 - 3	0 - 0	20 - 4	0 - 0	5 - 1	0 - 0	11 - 2	0 - 0	0 - 0	21.2
WEASEL ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	21 - 4	0 - 0	1.1

PREDATOR SURVEY LINE INDICES - 1980

STATE - KANSAS

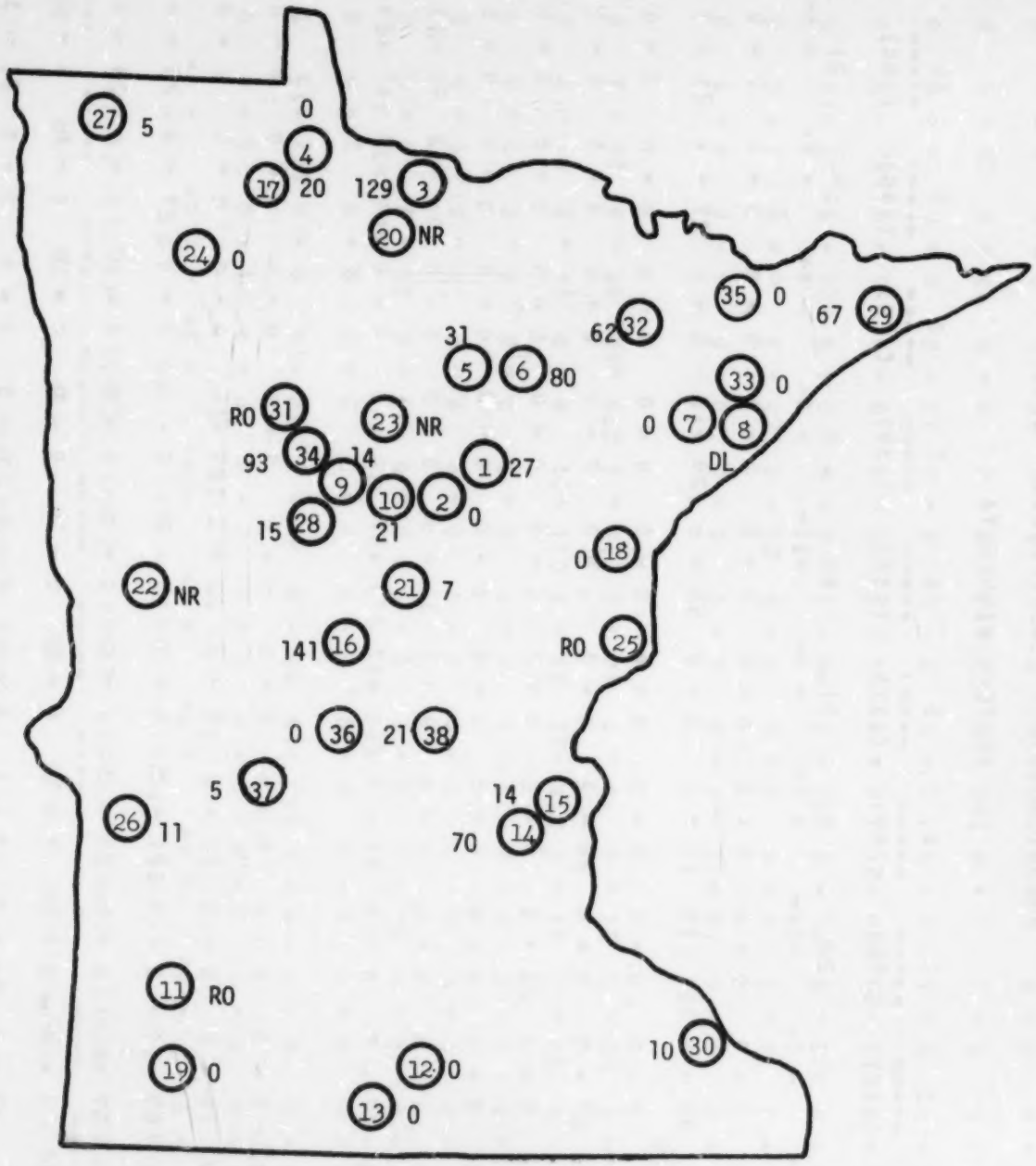
LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(175)	(159)	(166)	(189)	(199)	(175)	(189)	(178)	(0)	(189)
COYOTE ----	166 -29-	88 -14-	108 -18-	196 -37-	106 -21-	166 -29-	42 - 8-	107 -19-	0 - 0-	95 -18-
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	11 - 2	0 - 0	0 - 0	0 - 0	0 - 0
BADGER ----	57 -10	38 - 6	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	29 - 5	25 - 4	36 - 6	11 - 2	35 - 7	109 -19	21 - 4	11 - 2	0 - 0	48 - 9
SKUNK -----	11 - 2	31 - 5	6 - 1	0 - 0	5 - 1	17 - 3	16 - 3	11 - 2	0 - 0	0 - 0
OTHER CARNIVORES										
OPPOSSUM --	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	11 - 2	11 - 2	17 - 3	0 - 0	26 - 5
DOG -------	17 - 3	0 - 0	12 - 2	42 - 8	30 - 6	0 - 0	79 -15	129 -23	0 - 0	143 -27
CAT --------	137 -24	82 -13	6 - 1	11 - 2	0 - 0	0 - 0	26 - 5	56 -10	0 - 0	5 - 1
WEASEL ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - KANSAS

LINE NO. -	21	22	23							
SS-NIGHTS -	(196)	(188)	(178)	(						
COYOTE ----	163 -32-	447 -84-	112 -20-	-						
KIT FOX ---	0 - 0	0 - 0	6 - 1							
RED FOX ---	0 - 0	59 -11	0 - 0							
GRAY FOX --	0 - 0	0 - 0	0 - 0							
UNIDENTIFIE	0 - 0	0 - 0	0 - 0							
BOBCAT ----	0 - 0	0 - 0	0 - 0							
BADGER ----	0 - 0	0 - 0	6 - 1							
RACCOON ---	61 -12	69 -13	0 - 0							
SKUNK -----	5 - 1	37 - 7	0 - 0							
OTHER CARNIVORES										
OPPOSSUM --	5 - 1	0 - 0	0 - 0							
DOG -------	10 - 2	64 -12	6 - 1							
CAT -------	26 - 5	5 - 1	22 - 4							
WEASEL ----	0 - 0	0 - 0	0 - 0							

MINNESOTA


27 5
0
4
17 20
129 3
20 NR
24 0
35 0
67 29
62 32
31
5 6 80
33 0
RO 31
23 NR
0 7 8
DL
93 34 14
9
1 27
10 2 0
15 28 21
0 18
22 NR
21 7
141 16
RO 25
0 36 21 38
5 37
14 15
26 11
70 14
11 RO
10 30
19 0
12 0
13 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - MINNESOTA

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(184)	(188)	(93)	(99)	(131)	(137)	(139)	(0)	(148)	(144)	4670
COYOTE ----	27 - 5	0 - 0	129 -12	0 - 0	31 - 4	80 -11	0 - 0	0 - 0	14 - 2	21 - 3	22.9
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
RED FOX ---	5 - 1	32 - 6	161 -15	10 - 1	0 - 0	58 - 8	129 -18	0 - 0	27 - 4	21 - 3	44.8
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.4
UNIDENTIFIE	11 - 2	27 - 5	0 - 0	20 - 2	0 - 0	0 - 0	7 - 1	0 - 0	0 - 0	0 - 0	19.5
BOBCAT ----	5 - 1	5 - 1	22 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.7
BADGER ----	16 - 3	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.1
RACCOON ---	5 - 1	0 - 0	0 - 0	0 - 0	8 - 1	36 - 5	0 - 0	0 - 0	81 -12	90 -13	28.9
SKUNK -----	65 -12	37 - 7	0 - 0	71 - 7	206 -27	270 -37	14 - 2	0 - 0	264 -39	167 -24	77.5
OTHER CARNIVORES											
OPPOSSUM --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.2
BEAR ------	11 - 2	16 - 3	0 - 0	20 - 2	15 - 2	22 - 3	129 -18	0 - 0	0 - 0	0 - 0	12.6
DOG -------	5 - 1	53 -10	0 - 0	121 -12	0 - 0	15 - 2	0 - 0	0 - 0	27 - 4	28 - 4	25.9
CAT -------	54 -10	59 -11	0 - 0	20 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	28 - 4	38.5
WEASEL ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	3.2
MINK ------	5 - 1	27 - 5	86 - 8	10 - 1	8 - 1	7 - 1	0 - 0	0 - 0	0 - 0	21 - 3	16.1
GRAY WOLF -	0 - 0	0 - 0	22 - 2	0 - 0	8 - 1	15 - 2	65 - 9	0 - 0	0 - 0	0 - 0	9.2

PREDATOR SURVEY LINE INDICES - 1980

STATE - MINNESOTA

LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(0)	(197)	(199)	(100)	(146)	(99)	(153)	(140)	(147)	(0)
COYOTE ----	0 - 0	0 - 0	0 - 0	70 - 7	14 - 2	141 -14	20 - 3	0 - 0	0 - 0	0 - 0
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	5 - 1	190 -19	55 - 8	20 - 2	72 -11	0 - 0	102 -15	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	20 - 4	30 - 6	10 - 1	0 - 0	0 - 0	13 - 2	21 - 3	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BADGER ----	0 - 0	0 - 0	0 - 0	10 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	0 - 0	10 - 2	10 - 2	210 -21	27 - 4	111 -11	0 - 0	14 - 2	48 - 7	0 - 0
SKUNK -----	0 - 0	20 - 4	30 - 6	70 - 7	14 - 2	10 - 1	275 -42	57 - 8	20 - 3	0 - 0
OTHER CARNIVORES										
OPPOSSUM --	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	20 - 2	20 - 3	0 - 0	0 - 0	0 - 0
DOG -------	0 - 0	25 - 5	25 - 5	30 - 3	96 -14	0 - 0	0 - 0	21 - 3	68 -10	0 - 0
CAT -------	0 - 0	132 -26	106 -21	0 - 0	14 - 2	0 - 0	0 - 0	0 - 0	122 -18	0 - 0
WEASEL ----	0 - 0	5 - 1	0 - 0	0 - 0	7 - 1	0 - 0	13 - 2	0 - 0	34 - 5	0 - 0
MINK ------	0 - 0	0 - 0	0 - 0	280 -28	82 -12	0 - 0	0 - 0	7 - 1	20 - 3	0 - 0
GRAY WOLF -	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	65 -10	0 - 0	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - MINNESOTA

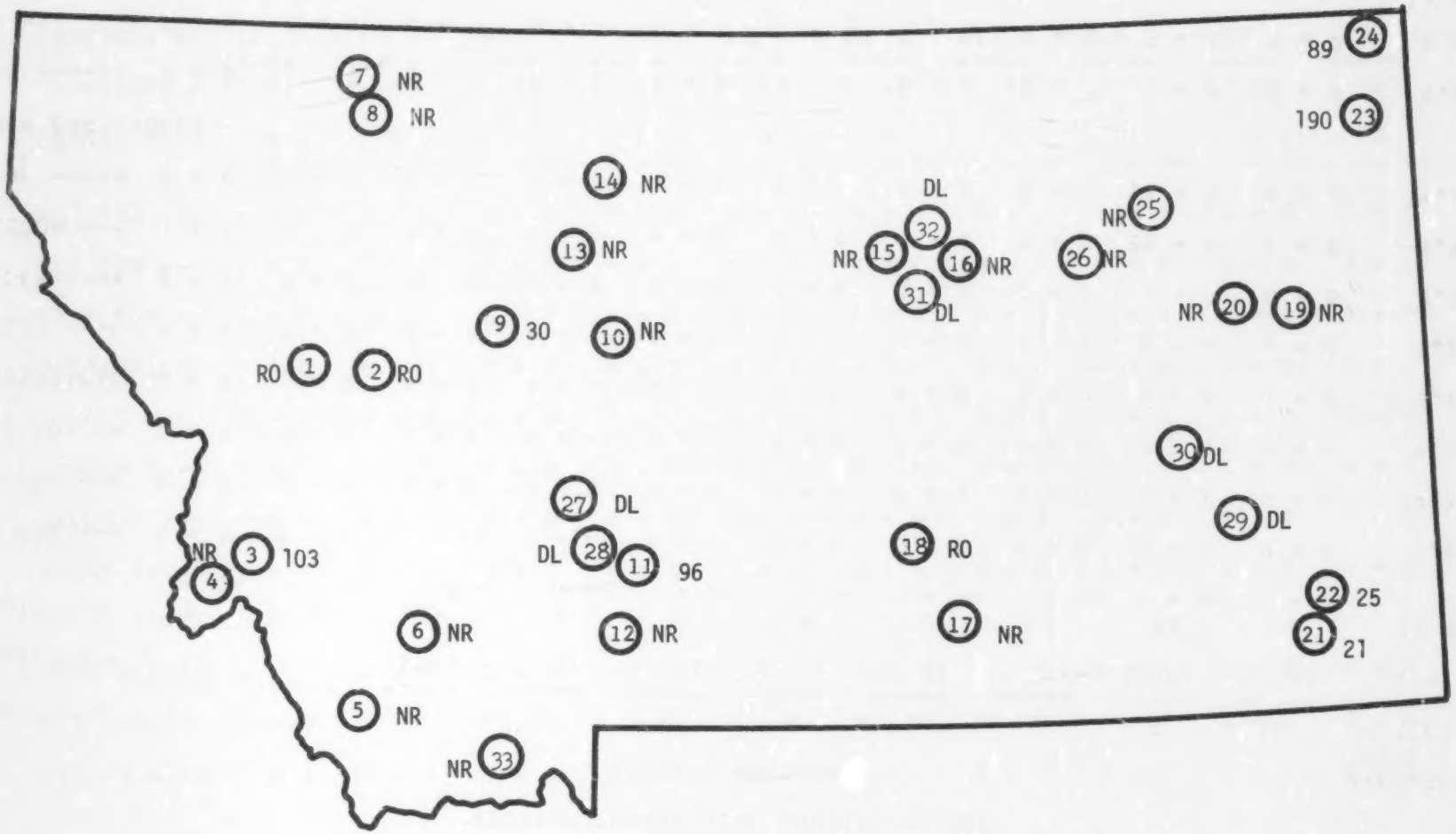
LINE NO. -	21	22	23	24	25	26	27	28	29	30
SS-NIGHTS -	(135)	(0)	(0)	(168)	(0)	(190)	(199)	(199)	(149)	(99)
COYOTE ----	7 - 1	0 - 0	0 - 0	0 - 0	0 - 0	11 - 2	5 - 1	15 - 3	67 -10	10 - 1
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	0 - 0	30 - 5	0 - 0	95 -18	111 -22	15 - 3	141 -21	51 - 5
GRAY FOX --	15 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	91 - 9
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	185 -31	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	30 - 3
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	5 - 1	0 - 0	0 - 0
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	81 -11	0 - 0	0 - 0	24 - 4	0 - 0	16 - 3	5 - 1	20 - 4	0 - 0	61 - 6
SKUNK -----	15 - 2	0 - 0	0 - 0	250 -42	0 - 0	32 - 6	90 -18	75 -15	60 - 9	40 - 4
OTHER CARNIVORES										
OPPOSSUM --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BEAR ------	15 - 2	0 - 0	0 - 0	6 - 1	0 - 0	0 - 0	5 - 1	0 - 0	27 - 4	0 - 0
DOG -------	30 - 4	0 - 0	0 - 0	6 - 1	0 - 0	11 - 2	0 - 0	5 - 1	0 - 0	40 - 4
CAT -------	52 - 7	0 - 0	0 - 0	6 - 1	0 - 0	11 - 2	5 - 1	95 -19	0 - 0	10 - 1
WEASEL ----	0 - 0	0 - 0	0 - 0	12 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
MINK ------	0 - 0	0 - 0	0 - 0	6 - 1	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	20 - 2
GRAY WOLF -	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	47 - 7	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - MINNESOTA

LINE NO. -	31	32	33	34	35	36	37	38		
SS-NIGHTS -	(0)	(145)	(198)	(150)	(186)	(121)	(191)	(96)	(	
COYOTE ----	0 - 0	62 - 9	0 - 0	93 -14	0 - 0	0 - 0	5 - 1	21 - 2	-	
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0		
RED FOX ---	0 - 0	21 - 3	0 - 0	0 - 0	5 - 1	74 - 9	37 - 7	31 - 3		
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0		
UNIDENTIFIE	0 - 0	0 - 0	96 -19	53 - 8	0 - 0	0 - 0	21 - 4	0 - 0		
BOBCAT ----	0 - 0	14 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0		
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0		
RACCOON ---	0 - 0	0 - 0	0 - 0	13 - 2	0 - 0	17 - 2	42 - 8	135 -13		
SKUNK -----	0 - 0	0 - 0	0 - 0	107 -16	0 - 0	74 - 9	31 - 6	73 - 7		
OTHER CARNIVORES										
OPPOSSUM --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0		
BEAR ------	0 - 0	0 - 0	5 - 1	13 - 2	70 -13	0 - 0	0 - 0	0 - 0		
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	107 -13	84 -16	73 - 7		
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	107 -13	215 -41	10 - 1		
WEASEL ----	0 - 0	14 - 2	0 - 0	7 - 1	0 - 0	0 - 0	5 - 1	0 - 0		
MINK ------	0 - 0	7 - 1	0 - 0	0 - 0	0 - 0	0 - 0	31 - 6	0 - 0		
GRAY WOLF -	0 - 0	7 - 1	5 - 1	7 - 1	48 - 9	0 - 0	0 - 0	0 - 0		

MONTANA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8 NR
14 NR
13 NR
9 30
10 NR
RO 1
2 RO
NR 3 103
4
27 DL
DL 28
11 96
6 NR
12 NR
5 NR
NR 33
DL 32
NR 15
16 NR
31 DL
NR 25
26 NR
NR 20
19 NR
30 DL
29 DL
18 RO
17 NR
89 24
190 23
22 25
21 21

PREDATOR SURVEY LINE INDICES - 1980

STATE - MONTANA

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(0)	(0)	(194)	(0)	(0)	(0)	(0)	(0)	(200)	(0)	1347
COYOTE ----	0 - 0	0 - 0	103 - 20	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	30 - 6	0 - 0	77.2
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	34.1
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	3.0
BOBCAT -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.2
BADGER -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.2
RACCOON ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	20 - 4	0 - 0	5.9
SKUNK ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	15 - 3	0 - 0	19.3
OTHER CARNIVORES											
BEAR -------	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.7
DOG --------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	8.9
CAT --------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	3.7

PREDATOR SURVEY LINE INDICES - 1980

STATE - MONTANA

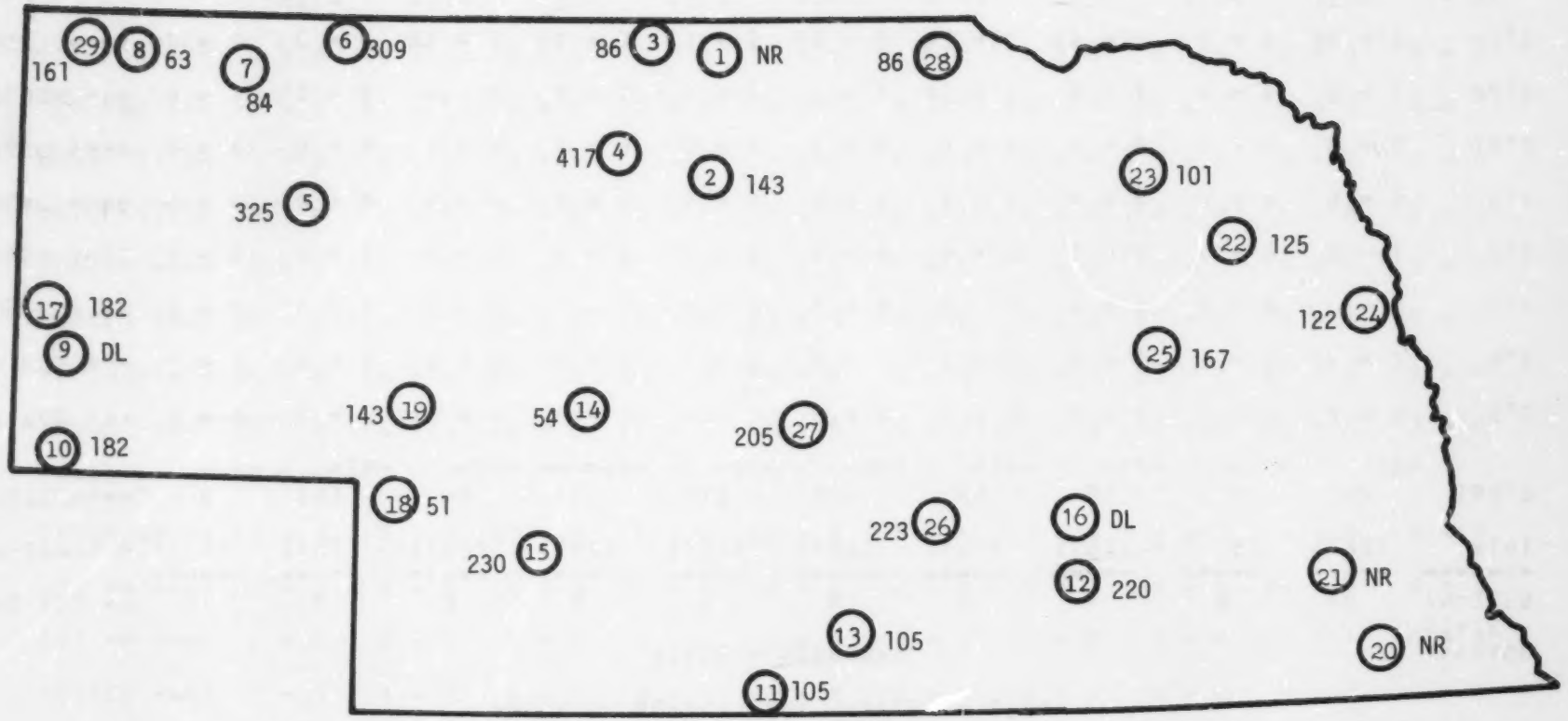
LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(188)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
COYOTE	96 -18-	0 - 0-	0 - 0-	0 - 0-	0 - 0-	0 - 0-	0 - 0-	0 - 0-	0 - 0-	0 - 0-
KIT FOX	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BADGER	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
SKUNK	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
OTHER CARNIVORES										
BEAR	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
DOG	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
CAT	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - MONTANA

LINE NO. -	21	22	23	24						
SS-NIGHTS -	(195)	(200)	(179)	(191)	(					
COYOTE ----	21 - 4	25 - 5	190 -34	89 -17	-					
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0						
RED FOX ---	0 - 0	0 - 0	50 - 9	188 -36						
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0						
UNIDENTIFIE	10 - 2	10 - 2	0 - 0	0 - 0						
BOBCAT ----	5 - 1	10 - 2	0 - 0	0 - 0						
BADGER ----	5 - 1	10 - 2	0 - 0	0 - 0						
RACCOON ---	5 - 1	10 - 2	6 - 1	0 - 0						
SKUNK -----	62 -12	55 -11	0 - 0	0 - 0						
OTHER CARNIVORES										
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0						
DOG -------	0 - 0	0 - 0	6 - 1	52 -10						
CAT -------	0 - 0	0 - 0	6 - 1	21 - 4						

NEBRASKA


29
161
8
63
7
84
6
309
86
3
1
NR
86
28
417
4
2
143
325
5
23
101
22
125
17
182
9
DL
122
24
25
167
143
19
54
14
205
27
10
182
18
51
223
26
16
DL
230
15
12
220
21
NR
13
105
20
NR
11
105

PREDATOR SURVEY LINE INDICES - 1980

STATE - NEBRASKA

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(0)	(182)	(162)	(192)	(197)	(149)	(191)	(191)	(0)	(192)	4101
COYOTE ----	0 - 0-	143 -26-	86 -14-	417 -80-	325 -64-	309 -46-	84 -16-	63 -12-	0 - 0-	182 -35-	160,9
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0,0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	16 - 3	6,1
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0,0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0,2
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0,0
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	12,2
RACCOON ---	0 - 0	11 - 2	0 - 0	0 - 0	0 - 0	7 - 1	37 - 7	5 - 1	0 - 0	5 - 1	22,9
SKUNK -----	0 - 0	0 - 0	25 - 4	16 - 3	15 - 3	13 - 2	52 -10	52 -10	0 - 0	36 - 7	47,3
OTHER CARNIVORES											
OPPOSSUM --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2,4
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	10 - 2	0 - 0	16 - 3	0 - 0	0 - 0	5 - 1	14,1
CAT -------	0 - 0	16 - 3	49 - 8	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	10 - 2	5,6
WEASEL ----	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0,5

PREDATOR SURVEY LINE INDICES - 1980

STATE - NEBRASKA

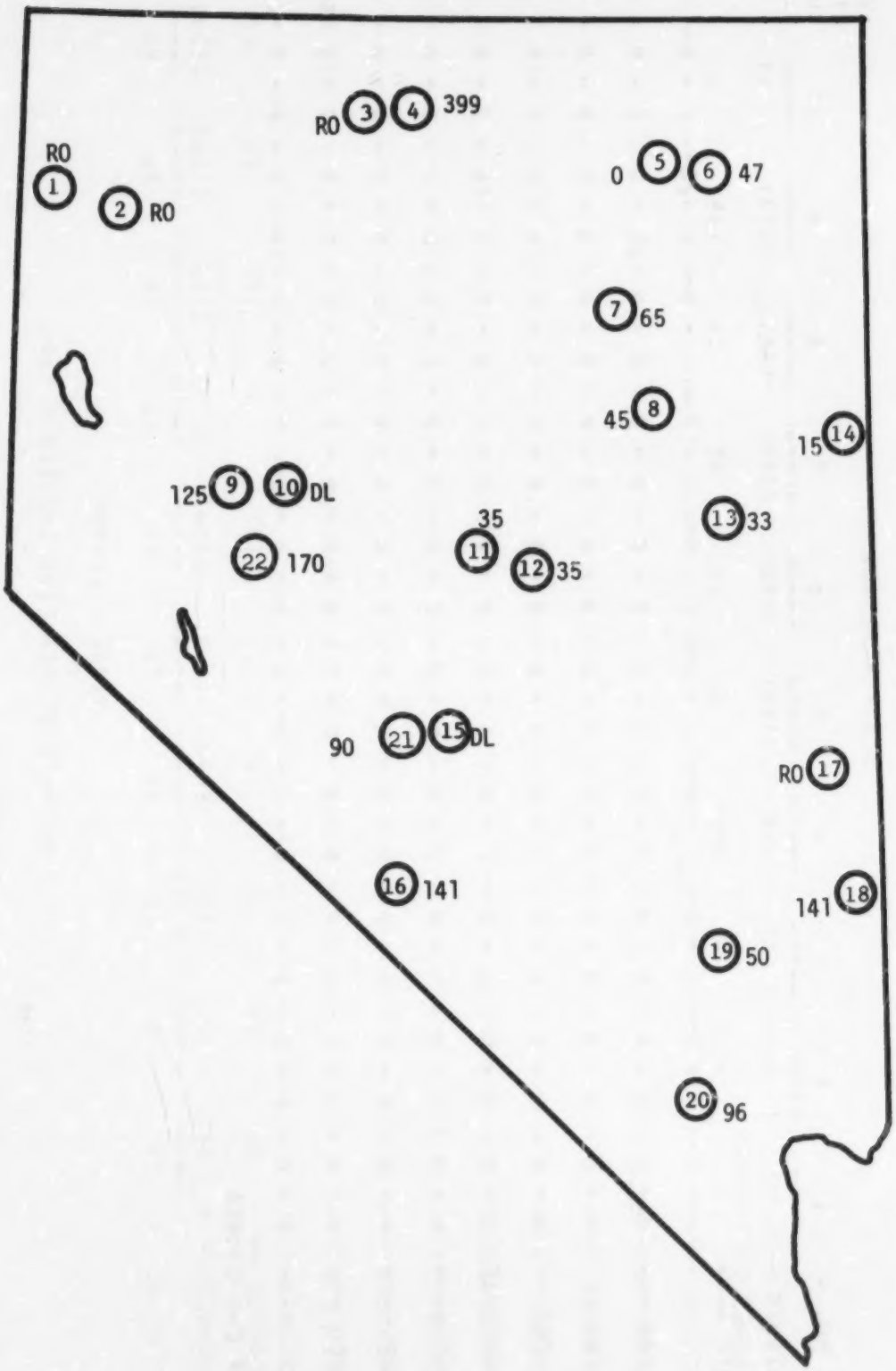
LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(190)	(123)	(191)	(185)	(161)	(0)	(198)	(198)	(189)	(0)
COYOTE ----	105 -20-	220 -27-	105 -20-	54 -10-	230 -37-	0 - 0-	182 -36-	51 -10-	143 -27-	0 - 0-
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	41 - 5	0 - 0	0 - 0	0 - 0	0 - 0	25 - 5	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BADGER ----	16 - 3	106 -13	26 - 5	38 - 7	25 - 4	0 - 0	0 - 0	10 - 2	5 - 1	0 - 0
RACCOON ---	32 - 6	16 - 2	26 - 5	16 - 3	56 - 9	0 - 0	0 - 0	25 - 5	11 - 2	0 - 0
SKUNK -----	21 - 4	106 -13	26 - 5	27 - 5	56 - 9	0 - 0	10 - 2	111 -22	21 - 4	0 - 0
OTHER CARNIVORES										
OPPOSSUM --	16 - 3	0 - 0	21 - 4	0 - 0	12 - 2	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0
DOG -------	21 - 4	0 - 0	16 - 3	22 - 4	0 - 0	0 - 0	15 - 3	30 - 6	26 - 5	0 - 0
CAT -------	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	10 - 2	5 - 1	5 - 1	0 - 0
WEASEL ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - NEBRASKA

LINE NO. -	21	22	23	24	25	26	27	28	29	
SS-NIGHTS -	(0)	(112)	(89)	(189)	(198)	(139)	(161)	(198)	(124)	(
COYOTE ----	0 - 0-	125 -14-	101 - 9-	122 -23-	167 -33-	223 -31-	205 -33-	86 -17-	161 -20-	-
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
RED FOX ---	0 - 0	0 - 0	0 - 0	37 - 7	20 - 4	0 - 0	0 - 0	0 - 0	0 - 0	
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
BADGER ----	0 - 0	0 - 0	34 - 3	0 - 0	5 - 1	7 - 1	0 - 0	10 - 2	65 - 8	
RACCOON ---	0 - 0	54 - 6	90 - 8	74 -14	35 - 7	29 - 4	0 - 0	5 - 1	81 -10	
SKUNK -----	0 - 0	0 - 0	0 - 0	175 -33	172 -34	29 - 4	19 - 3	15 - 3	113 -14	
OTHER CARNIVORES										
OPPOSSUM --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
DOG -------	0 - 0	36 - 4	56 - 5	48 - 9	25 - 5	14 - 2	0 - 0	10 - 2	0 - 0	
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	7 - 1	0 - 0	20 - 4	0 - 0	
WEASEL ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	

NEVADA


RO
1
2 RO
RO 3 4 399
0 5 6 47
7 65
45 8
15 14
125 9 10 DL
35
11 12 35
13 33
22 170
90 21 15 DL
RO 17
16 141
141 18
19 50
20 96

PREDATOR SURVEY LINE INDICES - 1980

STATE - NEVADA

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(0)	(0)	(0)	(148)	(185)	(192)	(200)	(200)	(200)	(0)	2811
COYOTE	0 - 0	0 - 0	0 - 0	399 -59-	0 - 0	47 - 9	65 -13-	45 - 9	125 -25-	0 - 0	85.4
KIT FOX	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	20 - 4	0 - 0	22.1
RED FOX	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
GRAY FOX	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	3.2
BOBCAT	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	1.1
BADGER	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
RACCOON	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
SKUNK	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
OTHER CARNIVORES											

PREDATOR SURVEY LINE INDICES - 1980

STATE - NEVADA

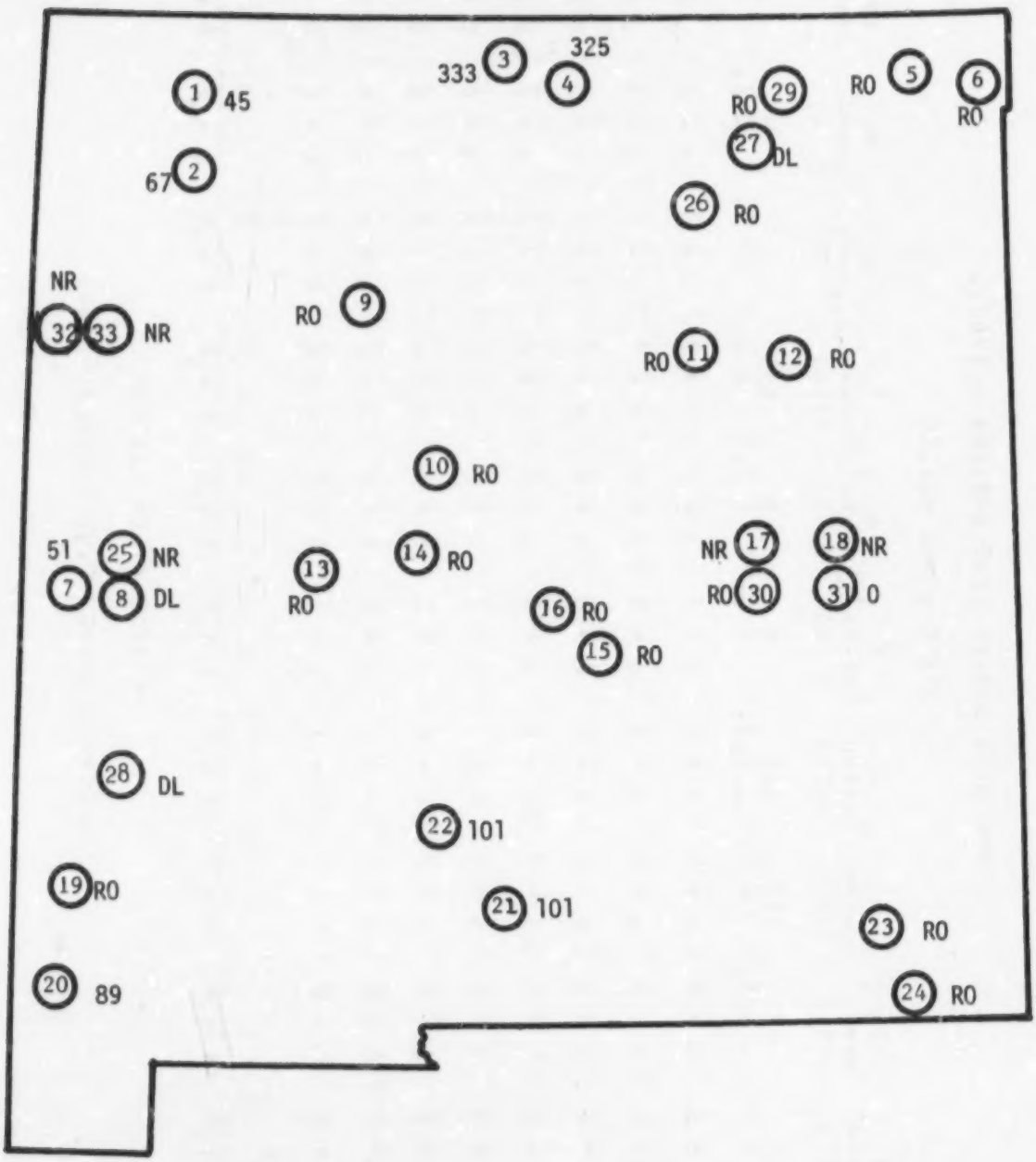
LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(200)	(200)	(183)	(200)	(0)	(149)	(0)	(135)	(179)	(104)
COYOTE ----	35 - 7	35 - 7	33 - 6	15 - 3	0 - 0	141 -21	0 - 0	141 -19	50 - 9	96 -10
KIT FOX ---	0 - 0	0 - 0	0 - 0	25 - 5	0 - 0	148 -22	0 - 0	0 - 0	6 - 1	192 -20
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	7 - 1	39 - 7	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	10 - 1
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
OTHER CARNIVORES										

PREDATOR SURVEY LINE INDICES - 1980

STATE - NEVADA

LINE NO. -	21	22								
SS-NIGHTS -	(177)	(159)	(							
COYOTE ----	90	170								
	-16-	-27-	-							
KIT FOX ---	0 - 0	63 -10								
RED FOX ---	0 - 0	0 - 0								
GRAY FOX --	0 - 0	0 - 0								
UNIDENTIFIE	0 - 0	0 - 0								
BOBCAT ----	0 - 0	6 - 1								
BADGER ----	0 - 0	0 - 0								
RACCOON ---	0 - 0	0 - 0								
SKUNK -----	0 - 0	0 - 0								
OTHER CARNIVORES										

NEW MEXICO


1 45
333 3
325
4
RO 29
RO 5
6 RO
27 DL
67 2
26 RO
NR
32 33 NR
RO 9
RO 11
12 RO
10 RO
51 25 NR
7 8 DL
13 RO
14 RO
NR 17
18 NR
RO 30
31 0
16 RO
15 RO
28 DL
22 101
19 RO
21 101
23 RO
20 89
24 RO

PREDATOR SURVEY LINE INDICES - 1980

STATE - NEW MEXICO

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(157)	(194)	(150)	(200)	(0)	(0)	(176)	(0)	(0)	(0)	1374
COYOTE ----	45 - 7 -	67 -13-	333 -50-	325 -65-	0 - 0 -	0 - 0 -	51 - 9 -	0 - 0 -	0 - 0 -	0 - 0 -	133.2
KIT FOX ---	13 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.2
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.7
UNIDENTIFIE	0 - 0	0 - 0	47 - 7	30 - 6	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	9.5
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.5
BADGER ----	6 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.5
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
SKUNK -----	0 - 0	0 - 0	0 - 0	15 - 3	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.2
OTHER CARNIVORES											
DOG -------	0 - 0	10 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.5

PREDATOR SURVEY LINE INDICES - 1980

STATE - NEW MEXICO

LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(101)
COYOTE ----	0 - 0 -	0 - 0 -	0 - 0 -	0 - 0 -	0 - 0 -	0 - 0 -	0 - 0 -	0 - 0 -	0 - 0 -	89 - 9 -
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	10 - 1
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
OTHER CARNIVORES										
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - NEW MEXICO

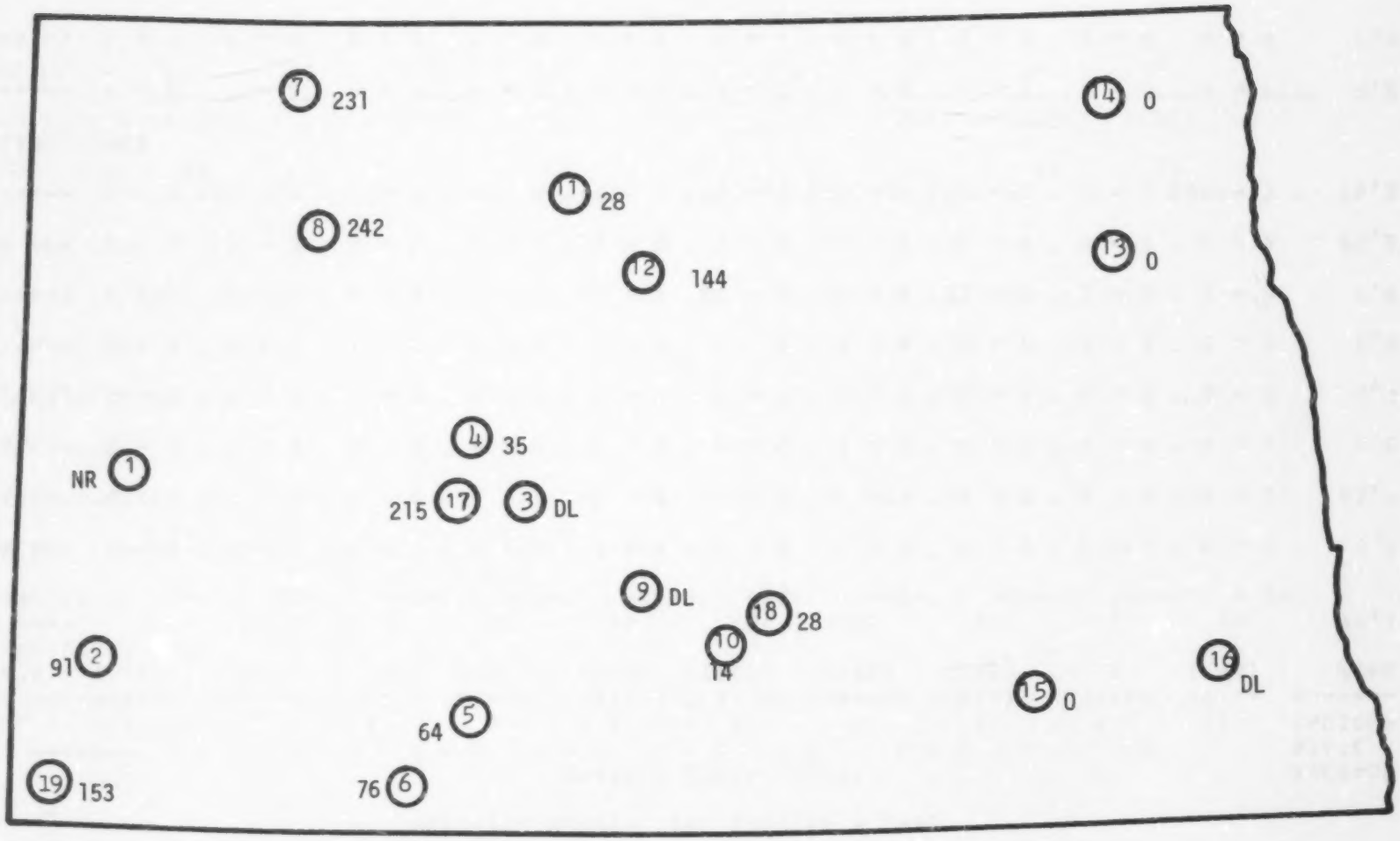
LINE NO. -	21	22	23	24	25	26	27	28	29	30
SS-NIGHTS -	(149)	(149)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
COYOTE	101 -15-	101 -15-	0 - 0-	0 - 0-	0 - 0-	0 - 0-	0 - 0-	0 - 0-	0 - 0-	0 - 0-
KIT FOX	7 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX	7 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT	7 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BADGER	7 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
SKUNK	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
OTHER CARNIVORES										
DOG	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - NEW MEXICO

LINE NO. -	31								
SS-NIGHTS -	(98)	(							
COYOTE	0 - 0								
KIT FOX	0 - 0								
RED FOX	0 - 0								
GRAY FOX	0 - 0								
UNIDENTIFIE	0 - 0								
BOBCAT	0 - 0								
BADGER	0 - 0								
RACCOON	0 - 0								
SKUNK	0 - 0								
OTHER CARNIVORES									
DOG	0 - 0								

NORTH DAKOTA



PREDATOR SURVEY LINE INDICES - 1980

STATE - NORTH DAKOTA

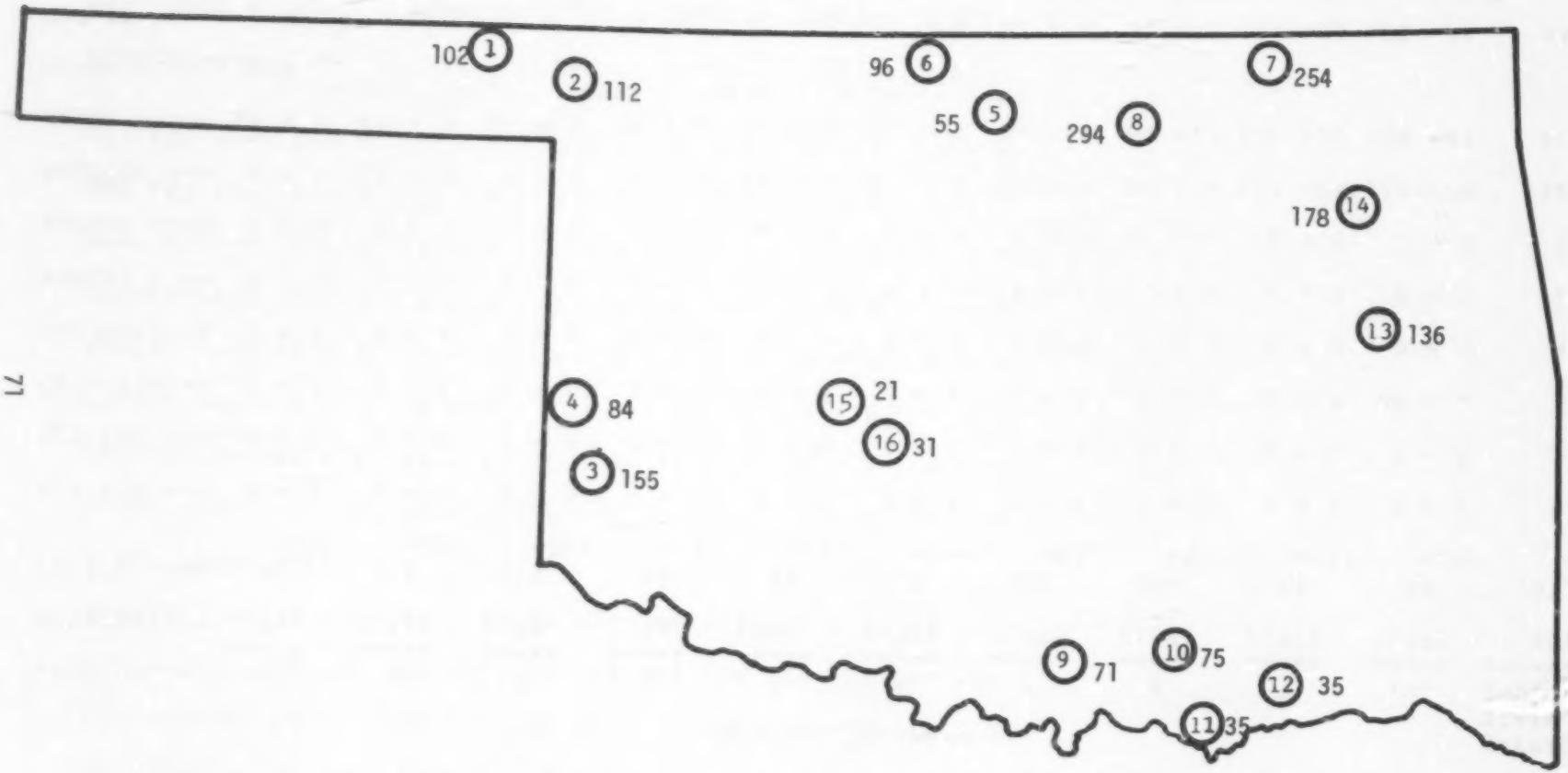
LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(0)	(121)	(0)	(200)	(125)	(145)	(195)	(198)	(0)	(145)	2266
COYOTE ----	0 - 0	91 -11	0 - 0	35 - 7	64 - 8	76 -11	231 -45	242 -48	0 - 0	14 - 2	98.4
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
RED FOX ---	0 - 0	17 - 2	0 - 0	10 - 2	48 - 6	34 - 5	97 -19	45 - 9	0 - 0	76 -11	63.5
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	4.9
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	16 - 2	28 - 4	10 - 2	35 - 7	0 - 0	0 - 0	7.9
RACCOON ---	0 - 0	17 - 2	0 - 0	0 - 0	16 - 2	14 - 2	67 -13	30 - 6	0 - 0	0 - 0	25.2
SKUNK -----	0 - 0	124 -15	0 - 0	0 - 0	48 - 6	90 -13	149 -29	101 -20	0 - 0	103 -15	76.3
OTHER CARNIVORES											
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.2
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.9

PREDATOR SURVEY LINE INDICES - 1980

STATE - NORTH DAKOTA

LINE NO. -	11	12	13	14	15	16	17	18	19	
SS-NIGHTS -	(142)	(139)	(97)	(95)	(188)	(0)	(200)	(145)	(131)	(
COYOTE ----	28 - 4	144 -20	0 - 0	0 - 0	0 - 0	0 - 0	215 -43	28 - 4	153 -20	-
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
RED FOX ----	127 -18	29 - 4	113 -11	74 - 7	144 -27	0 - 0	0 - 0	103 -15	61 - 8	
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
UNIDENTIFIE	56 - 8	7 - 1	10 - 1	11 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
BADGER ----	14 - 2	0 - 0	0 - 0	11 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	
RACCOON ---	28 - 4	0 - 0	21 - 2	11 - 1	85 -16	0 - 0	0 - 0	7 - 1	61 - 8	
SKUNK -----	77 -11	36 - 5	103 -10	105 -10	59 -11	0 - 0	0 - 0	97 -14	107 -14	
OTHER CARNIVORES										
DOG -------	0 - 0	0 - 0	0 - 0	21 - 2	5 - 1	0 - 0	0 - 0	14 - 2	0 - 0	
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	11 - 2	0 - 0	0 - 0	0 - 0	0 - 0	

OKLAHOMA


1 102
2 112
6 96
5 55
8 294
7 254
14 178
13 136
4 84
3 155
15 21
16 31
9 71
10 75
12 35
11 35

PREDATOR SURVEY LINE INDICES - 1980

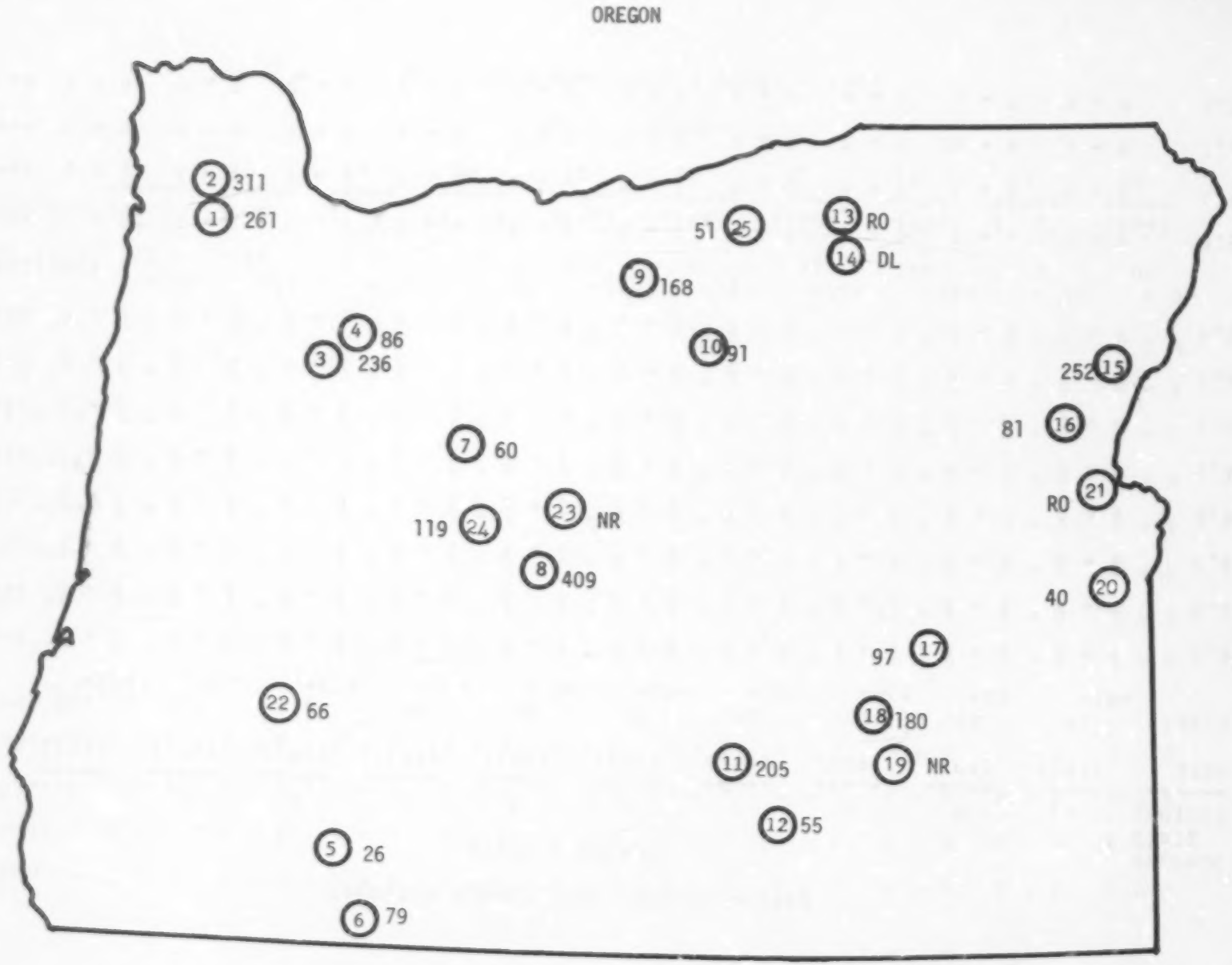
STATE - OKLAHOMA

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(196)	(196)	(193)	(154)	(200)	(195)	(197)	(187)	(197)	(199)	3074
COYOTE ----	102 -20-	112 -22-	155 -30-	84 -13-	55 -11-	97 -19-	254 -50-	294 -55-	71 -14-	75 -15-	107.4
KIT FOX ---	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.3
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	20 - 4	2.0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	5 - 1	0 - 0	0 - 0	0 - 0	1.6
BADGER ----	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	11 - 2	0 - 0	0 - 0	1.0
RACCOON ---	5 - 1	10 - 2	5 - 1	19 - 3	15 - 3	21 - 4	25 - 5	32 - 6	117 -23	126 -25	32.2
SKUNK -----	26 - 5	41 - 8	26 - 5	78 -12	20 - 4	26 - 5	56 -11	64 -12	127 -25	136 -27	61.2
OTHER CARNIVORES											
OPPOSSUM --	0 - 0	0 - 0	5 - 1	6 - 1	60 -12	51 -10	41 - 8	21 - 4	117 -23	121 -24	43.9
DOG -------	0 - 0	5 - 1	0 - 0	0 - 0	5 - 1	26 - 5	25 - 5	21 - 4	122 -24	126 -25	49.8
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	51 -10	75 -15	26.0
ARMADILLO -	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	20 - 4	30 - 6	15.9

PREDATOR SURVEY LINE INDICES - 1980

STATE - OKLAHOMA

LINE NO. -	11	12	13	14	15	16				
SS-NIGHTS -	(200)	(199)	(191)	(185)	(191)	(194)	(			
COYOTE ----	25 - 5	35 - 7	136 -26	178 -33	21 - 4	31 - 6	-			
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0				
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0				
GRAY FOX --	0 - 0	5 - 1	0 - 0	5 - 1	0 - 0	0 - 0				
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0				
BOBCAT ----	10 - 2	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0				
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0				
RACCOON ---	40 - 8	15 - 3	31 - 6	49 - 9	0 - 0	0 - 0				
SKUNK -----	60 -12	45 - 9	131 -25	114 -21	10 - 2	26 - 5				
OTHER CARNIVORES										
OPPOSSUM --	30 - 6	20 - 4	126 -24	92 -17	5 - 1	0 - 0				
DOG -------	45 - 9	50 -10	120 -23	103 -19	58 -11	82 -16				
CAT -------	45 - 9	25 - 5	105 -20	97 -18	0 - 0	15 - 3				
ARMADILLO -	150 -30	40 - 8	0 - 0	0 - 0	0 - 0	5 - 1				


OREGON
2 311
1 261
51 25
13 RO
14 DL
9 168
4 86
3 236
10 91
252 15
81 16
7 60
21 RO
119 24
23 NR
8 409
40 20
97 17
22 66
18 180
11 205
19 NR
12 55
5 26
6 79

PREDATOR SURVEY LINE INDICES - 1980

STATE - OREGON

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(153)	(196)	(199)	(187)	(195)	(191)	(200)	(149)	(197)	(197)	3723
COYOTE ----	261 -40-	311 -61-	236 -47-	86 -16-	26 - 5-	79 -15-	60 -12-	409 -61-	168 -33-	91 -18-	138.3
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
BOBCAT ----	7 - 1	0 - 0	5 - 1	5 - 1	5 - 1	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	1.3
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.1
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.3
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	10 - 2	0 - 0	0.5
OTHER CARNIVORES											
BEAR ------	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0.5
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0.5
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	20 - 4	0 - 0	1.1
MT. LION --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.3

PREDATOR SURVEY LINE INDICES - 1980

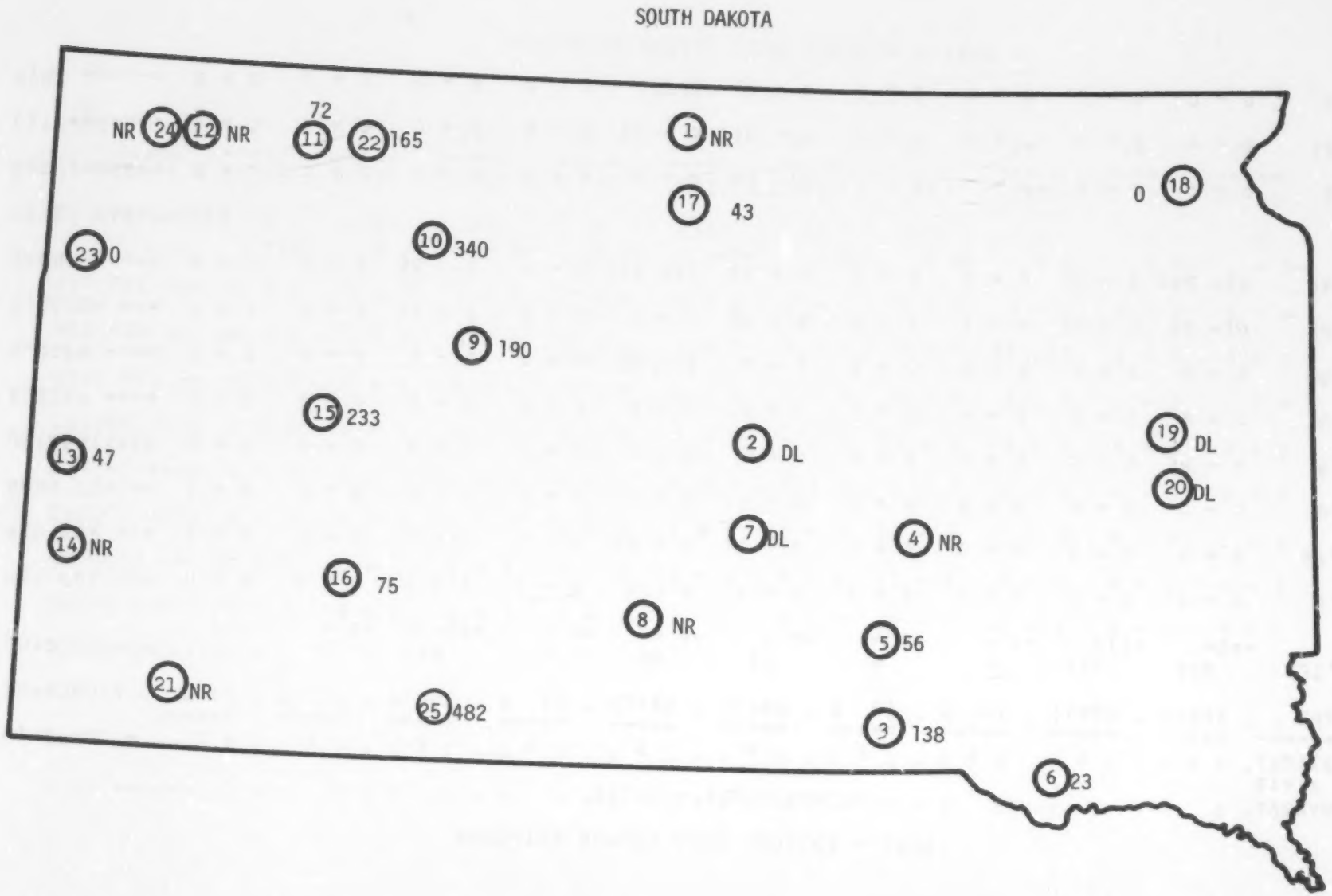
STATE - OREGON

LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(200)	(199)	(0)	(0)	(147)	(148)	(195)	(183)	(0)	(199)
COYOTE ----	205 -41-	55 -11-	0 - 0-	0 - 0-	252 -37-	81 -12-	97 -19-	180 -33-	0 - 0-	40 - 8-
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	22 - 4	0 - 0	0 - 0
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
OTHER CARNIVORES										
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
MT. LION --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - OREGON

LINE NO. -	21	22	23	24	25					
SS-NIGHTS -	(0)	(196)	(0)	(194)	(198)	(				
COYOTE ----	0 - 0	66 - 13	0 - 0	119 - 23	51 - 10	-				
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0					
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0					
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0					
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0					
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0					
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	20 - 4					
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1					
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0					
OTHER CARNIVORES										
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0					
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1					
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0					
MT. LION --	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0					


SOUTH DAKOTA
NR
24
12
NR
72
11
22
165
1
NR
17
43
0
18
23
0
10
340
9
190
15
233
2
DL
19
DL
13
47
20
DL
14
NR
7
DL
4
NR
16
75
8
NR
5
56
21
NR
25
482
3
138
6
23

PREDATOR SURVEY LINE INDICES - 1980

STATE - SOUTH DAKOTA

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(0)	(0)	(130)	(0)	(142)	(174)	(0)	(0)	(142)	(159)	2361
COYOTE ----	0 - 0	0 - 0	138 -18	0 - 0	56 - 8	23 - 4	0 - 0	0 - 0	190 -27	340 -54	135.1
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	42 - 6	11 - 2	0 - 0	0 - 0	0 - 0	0 - 0	27.5
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	38 - 6	5.1
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.4
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	85 -12	6 - 1	0 - 0	0 - 0	0 - 0	0 - 0	8.0
RACCOON ---	0 - 0	0 - 0	23 - 3	0 - 0	7 - 1	29 - 5	0 - 0	0 - 0	42 - 6	82 -13	32.2
SKUNK -----	0 - 0	0 - 0	38 - 5	0 - 0	148 -21	23 - 4	0 - 0	0 - 0	35 - 5	182 -29	46.2
OTHER CARNIVORES											
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	63 -11	0 - 0	0 - 0	0 - 0	0 - 0	5.1
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	21 - 3	138 -24	0 - 0	0 - 0	0 - 0	0 - 0	12.3
MINK ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.1

PREDATOR SURVEY LINE INDICES - 1980

STATE - SOUTH DAKOTA

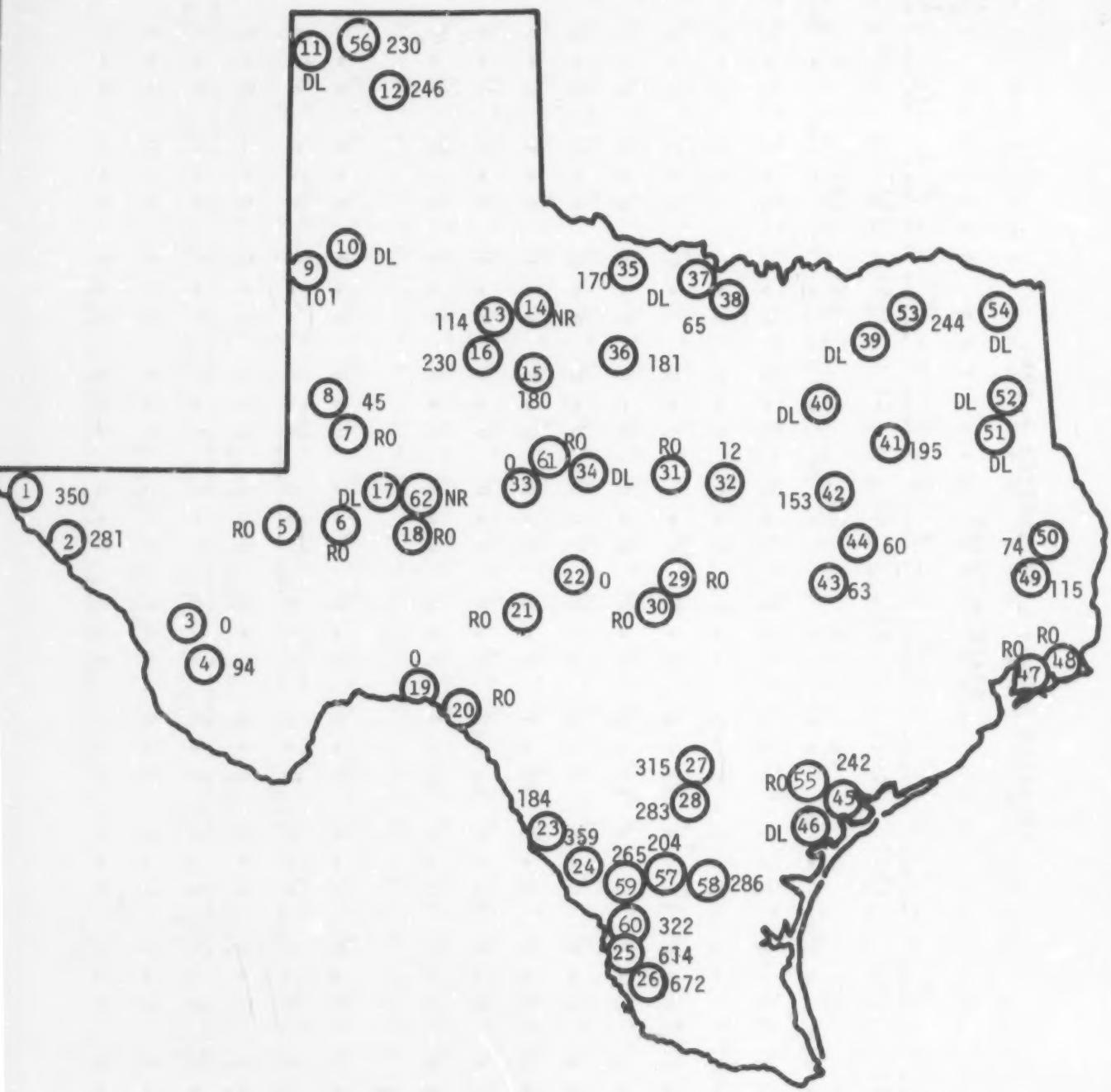
LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(180)	(0)	(193)	(0)	(172)	(200)	(94)	(185)	(0)	(0)
COYOTE ----	72 -13-	0 - 0-	47 - 9-	0 - 0-	233 -40-	75 -15-	43 - 4-	0 - 0-	0 - 0-	0 - 0-
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	28 - 5	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	97 -18	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	53 - 5	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BADGER ----	6 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	32 - 3	11 - 2	0 - 0	0 - 0
RACCOON ---	28 - 5	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	11 - 1	0 - 0	0 - 0	0 - 0
SKUNK -----	44 - 8	0 - 0	0 - 0	0 - 0	6 - 1	0 - 0	64 - 6	65 -12	0 - 0	0 - 0
OTHER CARNIVORES										
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	6 - 1	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0
MINK ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	11 - 1	5 - 1	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - SOUTH DAKOTA

LINE NO. -	21	22	23	24	25					
SS-NIGHTS -	(0)	(200)	(195)	(0)	(195)	(				
COYOTE ----	0 - 0	165 -33	0 - 0	0 - 0	482 -94	-				
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0					
RED FOX ---	0 - 0	0 - 0	174 -34	0 - 0	0 - 0					
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0					
UNIDENTIFIE	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0					
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1					
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0					
RACCOON ---	0 - 0	10 - 2	0 - 0	0 - 0	205 -40					
SKUNK -----	0 - 0	20 - 4	21 - 4	0 - 0	51 -10					
OTHER CARNIVORES										
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0					
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0					
MINK ------	0 - 0	0 - 0	0 - 0	0 - 0	15 - 3					

TEXAS


11 56 230
DL
12 246
10 DL
9
101
170 35
37 DL
38
65
114 13 14 NR
16
230
15
180
36 181
53 244
54
DL
39
DL
8 45
7 RO
DL 40
DL 52
41 195
51
DL
RO
0 61
34 DL
33
RO 31
12 32
1 350
DL 17 62 NR
153 42
2 281
RO 5
6
RO
18 RO
44 60
74 50
49 115
22 0
29 RO
43 63
RO 21
RO 30
3 0
4 94
0
19
20 RO
RO
RO
47 48
315 27
242
RO 55
45
184
28
283
23
359
DL 46
204
265
24
59
57
58 286
60 322
25 614
26 672

PREDATOR SURVEY LINE INDICES - 1980

STATE - TEXAS

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(200)	(196)	(150)	(181)	(0)	(0)	(0)	(155)	(139)	(0)	6572
COYOTE ----	350 - 70	281 - 55	0 - 0	94 - 17	0 - 0	0 - 0	0 - 0	45 - 7	101 - 14	0 - 0	201.8
KIT FOX ---	20 - 4	61 -12	7 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.6
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.5
GRAY FOX --	5 - 1	0 - 0	13 - 2	33 - 6	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	8.7
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	11 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	4.6
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5.6
BADGER ----	0 - 0	0 - 0	0 - 0	39 - 7	0 - 0	0 - 0	0 - 0	6 - 1	7 - 1	0 - 0	3.0
RACCOON ---	0 - 0	0 - 0	33 - 5	66 -12	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	29.8
SKUNK -----	0 - 0	0 - 0	40 - 6	39 - 7	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	19.9
OTHER CARNIVORES											
OPPOSSUM --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	7.8
DOG -------	25 - 5	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	6 - 1	0 - 0	0 - 0	9.4
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.1
RINGTAIL --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.0
JAVELINA --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	3.5
ARMADILLO -	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5.9

PREDATOR SURVEY LINE INDICES - 1980

STATE - TEXAS

LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(0)	(199)	(132)	(0)	(200)	(165)	(0)	(0)	(174)	(0)
COYOTE ----	0 - 0	246 -49	114 -15	0 - 0	180 -36	230 -38	0 - 0	0 - 0	0 - 0	0 - 0
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	57 -10	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	15 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	10 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	0 - 0	85 -17	0 - 0	0 - 0	20 - 4	0 - 0	0 - 0	0 - 0	17 - 3	0 - 0
SKUNK -----	0 - 0	55 -11	0 - 0	0 - 0	90 -18	0 - 0	0 - 0	0 - 0	17 - 3	0 - 0
OTHER CARNIVORES										
OPPOSSUM --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RINGTAIL --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	69 -12	0 - 0
JAVELINA --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
ARMADILLO -	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - TEXAS

LINE NO. -	21	22	23	24	25	26	27	28	29	30
SS-NIGHTS -	(0)	(150)	(190)	(195)	(189)	(195)	(197)	(198)	(0)	(0)
COYOTE ----	0 - 0-	0 - 0-	184 -35-	359 -70-	614 ***	672 ***	315 -62-	283 -56-	0 - 0-	0 - 0-
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	7 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	33 - 5	11 - 2	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	16 - 3	36 - 7	5 - 1	0 - 0	0 - 0	0 - 0
BADGER ----	0 - 0	0 - 0	5 - 1	21 - 4	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	0 - 0	60 - 9	11 - 2	15 - 3	95 -18	56 -11	30 - 6	5 - 1	0 - 0	0 - 0
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	26 - 5	46 - 9	0 - 0	0 - 0	0 - 0	0 - 0
OTHER CARNIVORES										
OPPOSSUM --	0 - 0	0 - 0	0 - 0	0 - 0	11 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	5 - 1	5 - 1	0 - 0	0 - 0	0 - 0
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	21 - 4	0 - 0	0 - 0	0 - 0	0 - 0
RINGTAIL --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
JAVELINA --	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	20 - 4	0 - 0	0 - 0
ARMADILLO -	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	10 - 2	0 - 0	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - TEXAS

LINE NO. -	31	32	33	34	35	36	37	38	39	40
SS-NIGHTS -	(0)	(86)	(200)	(0)	(200)	(199)	(0)	(200)	(0)	(0)
COYOTE ----	0 - 0	12 - 1	0 - 0	0 - 0	170 - 34	181 - 36	0 - 0	65 - 13	0 - 0	0 - 0
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	12 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	0 - 0	128 - 11	25 - 5	0 - 0	0 - 0	5 - 1	0 - 0	20 - 4	0 - 0	0 - 0
SKUNK -----	0 - 0	0 - 0	15 - 3	0 - 0	45 - 9	0 - 0	0 - 0	20 - 4	0 - 0	0 - 0
OTHER CARNIVORES										
OPPOSSUM --	0 - 0	23 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
DOG -------	0 - 0	93 - 8	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
CAT -------	0 - 0	12 - 1	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RINGTAIL --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
JAVELINA --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
ARMADILLO -	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - TEXAS

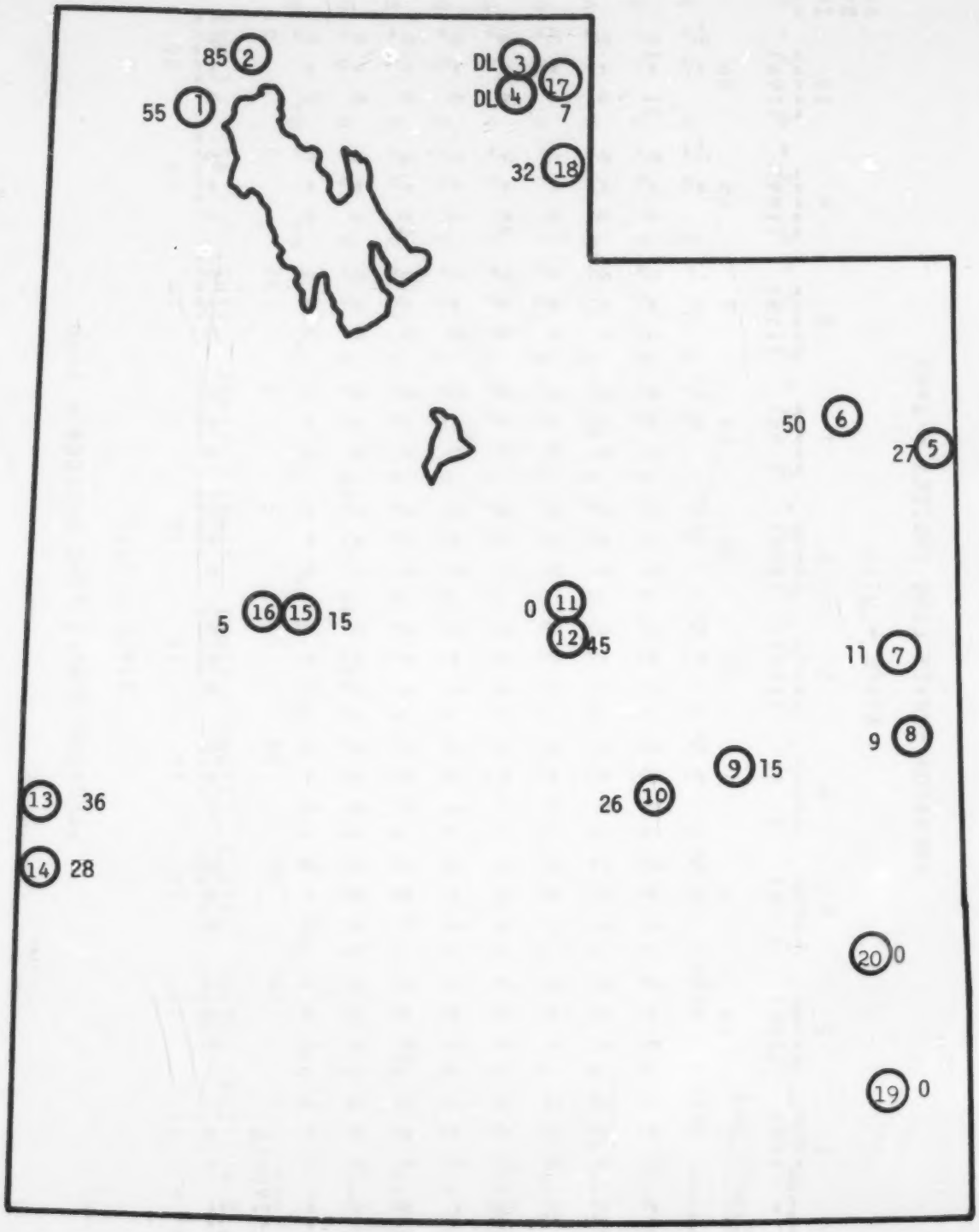
LINE NO. -	41	42	43	44	45	46	47	48	49	50
SS-NIGHTS -	(195)	(150)	(189)	(199)	(194)	(0)	(0)	(0)	(192)	(190)
COYOTE ----	195 -38-	153 -23-	63 -12-	60 -12-	242 -47-	0 - 0-	0 - 0-	0 - 0-	115 -22-	74 -14-
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1
GRAY FOX --	5 - 1	20 - 3	11 - 2	65 -13	15 - 3	0 - 0	0 - 0	0 - 0	16 - 3	26 - 5
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	21 - 4	0 - 0	0 - 0	0 - 0	62 -12	0 - 0	0 - 0	0 - 0	0 - 0	11 - 2
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ----	103 -20	20 - 3	53 -10	50 -10	72 -14	0 - 0	0 - 0	0 - 0	31 - 6	42 - 8
SKUNK ------	92 -18	27 - 4	11 - 2	35 - 7	36 - 7	0 - 0	0 - 0	0 - 0	10 - 2	5 - 1
OTHER CARNIVORES										
OPPOSSUM --	87 -17	27 - 4	21 - 4	10 - 2	46 - 9	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
DOG --------	21 - 4	93 -14	32 - 6	55 -11	0 - 0	0 - 0	0 - 0	0 - 0	26 - 5	11 - 2
CAT --------	5 - 1	0 - 0	16 - 3	10 - 2	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0
RINGTAIL --	0 - 0	7 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
JAVELINA --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
ARMADILLO -	0 - 0	33 - 5	32 - 6	20 - 4	77 -15	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

PREDATOR SURVEY LINE INDICES - 1980

STATE - TEXAS

LINE NO. -	51	52	53	54	55	56	57	58	59	60
SS-NIGHTS -	(0)	(0)	(193)	(0)	(0)	(200)	(196)	(185)	(200)	(199)
COYOTE ----	0 - 0	0 - 0	244 -47	0 - 0	0 - 0	230 -46	204 -40	286 -53	265 -53	322 -64
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	135 -27	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	31 - 6	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	20 - 4	0 - 0	0 - 0	0 - 0	0 - 0
RACCOON ---	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	36 - 7	11 - 2	0 - 0	15 - 3
SKUNK -----	0 - 0	0 - 0	31 - 6	0 - 0	0 - 0	30 - 6	10 - 2	5 - 1	0 - 0	0 - 0
OTHER CARNIVORES										
OPPOSSUM --	0 - 0	0 - 0	57 -11	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
DOG -------	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
RINGTAIL --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
JAVELINA --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	10 - 2	38 - 7	10 - 2	35 - 7
ARMADILLO -	0 - 0	0 - 0	31 - 6	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

UTAH



READEX FICHE

PREDATOR SURVEY LINE INDICES - 1980

STATE - UTAH

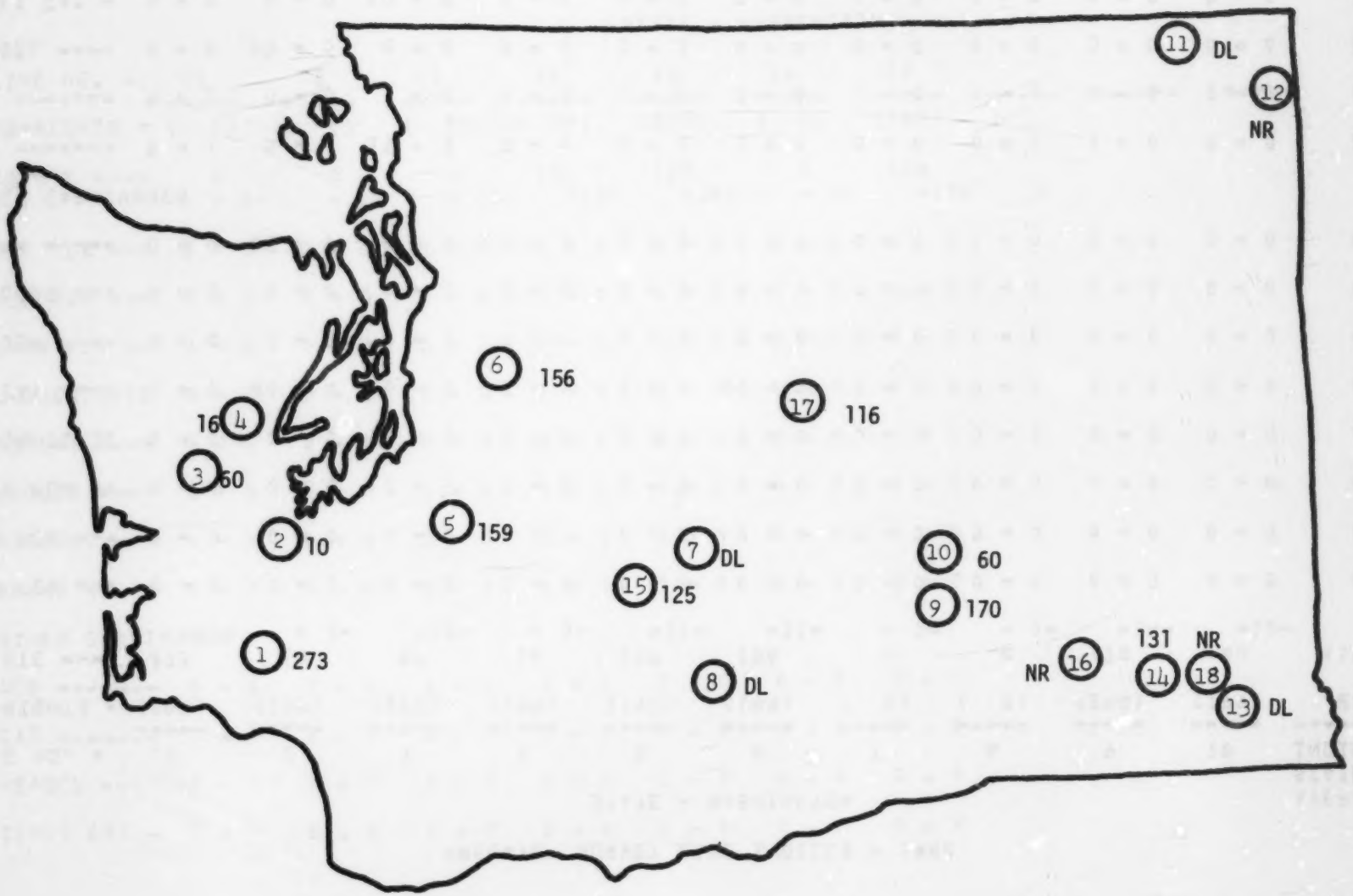
LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(199)	(200)	(0)	(0)	(150)	(200)	(95)	(115)	(199)	(196)	2942
COYOTE ----	55 -11-	85 -17-	0 - 0-	0 - 0-	27 - 4-	50 -10-	11 - 1-	9 - 1-	15 - 3-	26 - 5-	28.2
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	51 -10	29.6
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.4
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	45 - 9	0 - 0	6.1
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.3
BADGER ----	0 - 0	15 - 3	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	10 - 2	0 - 0	13.6
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.0
OTHER CARNIVORES											
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.7

PREDATOR SURVEY LINE INDICES - 1980

STATE - UTAH

LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(139)	(199)	(169)	(179)	(198)	(194)	(146)	(186)	(95)	(83)
COYOTE ----	0 - 0	45 - 9	36 - 6	28 - 5	15 - 3	5 - 1	7 - 1	32 - 6	0 - 0	0 - 0
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	247 -49	144 -28	0 - 0	0 - 0	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	22 - 4	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	36 - 6	17 - 3	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0
BADGER ----	58 - 8	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	62 - 9	97 -18	0 - 0	0 - 0
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	11 - 2	0 - 0	0 - 0
OTHER CARNIVORES										
DOG -------	14 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

WASHINGTON


11 DL
12 NR
6 156
17 116
16 4
3 60
2 10
5 159
7 DL
15 125
10 60
9 170
1 273
8 DL
NR 16
131 14
NR 18
13 DL

PREDATOR SURVEY LINE INDICES - 1980

STATE - WASHINGTON

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(194)	(197)	(200)	(189)	(195)	(199)	(0)	(0)	(200)	(199)	2019
COYOTE ----	273 -53-	10 - 2-	60 -12-	16 - 3-	159 -31-	156 -31-	0 - 0-	0 - 0-	170 -34-	60 -12-	115.4
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
BOBCAT ----	0 - 0	20 - 4	0 - 0	5 - 1	0 - 0	20 - 4	0 - 0	0 - 0	0 - 0	0 - 0	4.5
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
SKUNK -----	0 - 0	25 - 5	0 - 0	16 - 3	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	4.0
OTHER CARNIVORES											
DOG -------	5 - 1	5 - 1	15 - 3	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.5
CAT -------	5 - 1	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.5
WEASEL ----	0 - 0	25 - 5	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	2.5
CIVET CAT -	0 - 0	0 - 0	10 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	1.0

PREDATOR SURVEY LINE INDICES - 1980

STATE - WASHINGTON

LINE NO. -	11	12	13	14	15	16	17			
SS-NIGHTS -	(0)	(0)	(0)	(99)	(200)	(0)	(147)	(		
COYOTE ----	0 - 0	0 - 0	0 - 0	131 -13-	125 -25-	0 - 0	116 -17-	-		
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0			
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0			
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0			
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0			
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0			
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0			
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0			
SKUNK -----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0			
OTHER CARNIVORES										
DOG -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0			
CAT -------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0			
WEASEL ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0			
CIVET CAT -	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0			

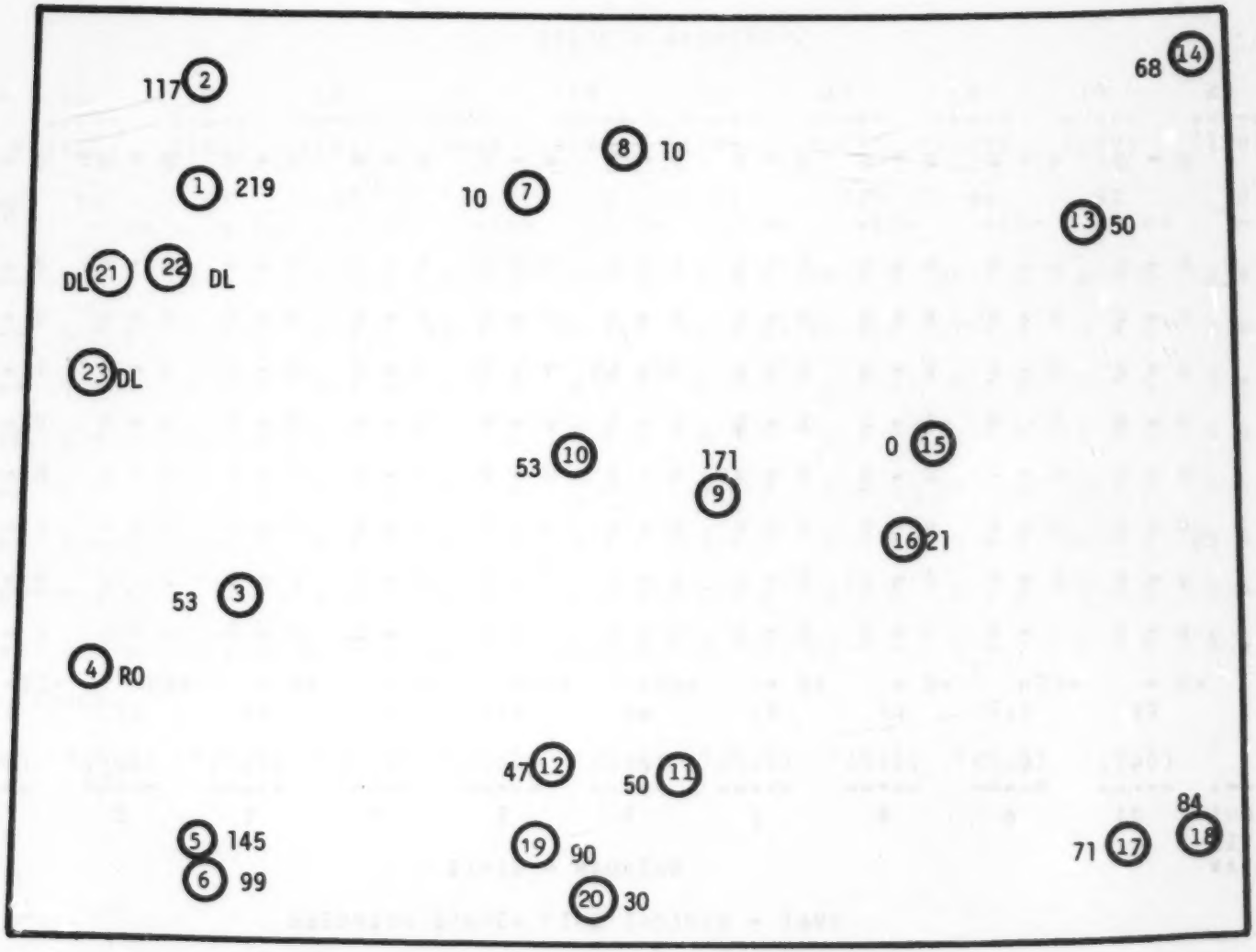
WISCONSIN

PREDATOR SURVEY LINE INDICES - 1980

STATE - WISCONSIN

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(200)	(200)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	400
COYOTE ----	45 - 9	70 -14	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	57.5
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
RED FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
BOBCAT ----	15 - 3	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	7.5
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
SKUNK -----185	-37	70 -14	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	127.5
OTHER CARNIVORES											
BEAR ------ 40	- 8	25 - 5	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	32.5

WYOMING


117 2
68 14
8 10
1 219
10 7
13 50
DL 21 22 DL
23 DL
53 10
171 9
0 15
16 21
53 3
4 RO
47 12
50 11
84
5 145
19 90
71 17
18
6 99
20 30

PREDATOR SURVEY LINE INDICES - 1980

STATE - WYOMING

LINE NO. -	1	2	3	4	5	6	7	8	9	10	AVERAGE STATE INDICES
SS-NIGHTS -	(151)	(197)	(150)	(0)	(200)	(182)	(200)	(200)	(193)	(150)	3289
COYOTE ----	219 -33-	117 -23-	53 - 8-	0 - 0-	145 -29-	99 -18-	10 - 2-	10 - 2-	171 -33-	53 - 8-	73.0
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	4.6
RED FOX ---	26 - 4	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	10 - 2	0 - 0	0 - 0	14.3
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.0
UNIDENTIFIE	13 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.6
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	0.3
BADGER ----	7 - 1	0 - 0	13 - 2	0 - 0	30 - 6	55 -10	0 - 0	0 - 0	0 - 0	0 - 0	8.2
RACCOON ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	3.6
SKUNK -----	13 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	6.7
OTHER CARNIVORES											
BEAR ------	0 - 0	10 - 2	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0.6

PREDATOR SURVEY LINE INDICES - 1980

STATE - WYOMING

LINE NO. -	11	12	13	14	15	16	17	18	19	20
SS-NIGHTS -	(100)	(150)	(121)	(146)	(195)	(195)	(183)	(179)	(199)	(198)
COYOTE ----	50 - 5-	47 - 7-	50 - 6-	68 -10-	0 - 0-	21 - 4-	71 -13-	84 -15-	90 -18-	30 - 6-
KIT FOX ---	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	49 - 9	34 - 6	0 - 0	0 - 0
RED FOX ---	0 - 0	0 - 0	0 - 0	62 - 9	87 -17	10 - 2	55 -10	17 - 3	0 - 0	0 - 0
GRAY FOX --	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
UNIDENTIFIE	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BOBCAT ----	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
BADGER ----	0 - 0	0 - 0	0 - 0	0 - 0	5 - 1	0 - 0	0 - 0	0 - 0	10 - 2	25 - 5
RACCOON ---	0 - 0	0 - 0	8 - 1	75 -11	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
SKUNK -----	0 - 0	0 - 0	50 - 6	48 - 7	10 - 2	0 - 0	22 - 4	0 - 0	0 - 0	5 - 1
OTHER CARNIVORES										
BEAR ------	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

APPENDIX A

Field Procedure Instructions and Observation Forms

ANNUAL PREDATOR SURVEY

Field Procedure Highlights

1. Use names, not numbers, to identify the field forms for your line(s). If you are not sure of the name(s), check with your supervisor.

2. Record the name of the county in which each line is located (not your home county or work area). If a line enters a second or third county, even briefly, record these also, but put the name of the county where most of the line is located first.

3. When setting up your line(s), number all stations exactly as in past years, with number one at the original starting point and number 50 at the original end point.

4. The survey will be run for 4 days. Fill out a form for each of the 4 days, even if you cannot run the line all 4 days, and make a note on the form for days missed explaining what happened (rained out, blown out, lack of vehicle or personnel). If you don't do this, we cannot be sure whether a daily form has been lost or what.

5. If, for convenience, you run a line backward, starting with station no. 50 instead of no. 1, be sure to record the first observation in the space for no. 50, and so forth. Then be sure to write "run backward" at the bottom of the field form.

6. Please get out of your vehicle at each station and examine the station carefully. A significant number of errors have occurred because of observers checking stations from the vehicle.

7. Please read pages 6-7 of these instructions and note the new recording procedures. These procedures were simplified to reduce confusion in deciding how to record what you observe. The absence of a capsule does not mean a station is inoperable (regardless what took the capsule); a station is inoperable ONLY if you feel that tracks made in the past 24 hours cannot be read because of wind, rain, snow, livestock trampling, vehicle tracks over most of the station, etc.

8. If you record a station as inoperable, be sure to state the reason.

9. If you miss a day of observation for any reason (weather, road conditions, vehicle problems, etc.) after a scent station line has been set out, do not record visits the following day; rather

you should re-set the stations (by simply brushing or by adding new dust and bait as needed) and read the following day. Otherwise, we are counting some accumulated visits but losing 50 operable scent-station nights for each day missed and this yields a false index.

10. Do not return left-over bait or used capsules; get rid of them with your trash at home or bury them, but do not leave them in the field.

11. Do return all unused capsules, sticks, tape, and gummed labels.

WESTERN PREDATOR SURVEY

September 10 - 14, 1979

Instructions to Field Personnel

The annual predator survey is now in its eighth year and running smoothly. Results have been more readily analyzed in the past couple of years because of excellent cooperation from the observers in recording data correctly. Getting several hundred people to do anything the same way would be impossible without a genuine spirit of cooperation among the group. Your efforts are appreciated.

Although we have far to go in understanding and interpreting the survey results--and although there are differences of opinion about its validity for specific localities--it is clear that the results of the survey are meaningful on the large scale it was designed for. In addition, the results have played a major role in alleviating the public concern for the survival of the coyote in the West.

There are no changes in procedures for 1979, but first-time observers should read the following pages carefully. "Old-timers" in the survey may also find it useful to refresh their memories by a quick review.

1. Existing survey lines

If you are running the same survey lines you ran last year, locate them along the same routes and start the lines at the same spot as last year. If you are running two lines, try to set them both out on the same day, preferably September 10. We find this difficult but possible on our Idaho lines, even though we have to load dust on the way out, but it may not be possible if your lines are far from your home or from each other. If you cannot set out both lines in one day, then set your first line on September 10 (if possible), check it the morning of September 11, and then set your second line during the afternoon of the 11th. Then check both lines daily for 4 days. Weather permitting, you will finish checking either both or your first line on September 14, and the second line on Stepember 15 if you staggered the beginning. A few men are running only one survey line, in which case you should finish your 4-day check on the 14th.

If all or part of a line must be temporarily or permanently relocated due to road or bridge repairs or improvements, logging activity, new land owners, etc., be sure to send in a map showing the changes along with your observation forms. Except when the relocation is temporary and affects only a small portion of the line, the line should be renamed.

2. New survey lines

This portion of the instructions is only for men who are running NEW scent station lines, that is, lines that were not run last year (1978)

A scent station line consists of 50 scent stations, located 3/10 mile apart, placed out on a continuous route. Each scent station line is thus 14.7 miles long (0.3 miles x 49 intervals between stations = 14.7 miles). All scent stations must be checked each day for 4 successive days, including weekends.

a. The two lines should be located within the area (75 x 75 miles) blocked out on the map given to you by your supervisor. The two lines should be <u>at least</u> 20 miles apart.

b. Both lines should be placed in typical coyote habitat through areas which you feel contain <u>average</u> coyote densities. Do not select areas containing very low or very high coyote densities since the purpose of these surveys is to measure <u>average</u> levels of abundance. Once you have selected your two 15-mile routes, draw with a penciled line the exact location of the two routes on a county, topographic, or other detailed map. The 50 scent stations on each line should be numbered 1-50. Also place on your map the exact mileage from the nearest main road to the start of your two survey lines. After the survey is completed, return the map along with the completed forms to your state supervisor.

c. Select your routes on unpaved secondary or ranch roads along which coyotes would normally travel. Do not use roads on which you have traps.

d. Try to locate lines on lands that are not likely to change ownership since we will want to run them each September for several years. Mention to the landowner or administering agency that your effort is part of similar surveys to be conducted throughout the western states.

3. <u>Scent stations</u>

a. A scent station consists of a 3-foot circle of sifted earth or sand in the center of which is placed a capsule containing an attractant. Scent stations should be placed just off the edge of the road so that they will not be driven over by vehicles, but close enough to the road edge so you can read sign without leaving the road. Each scent station should be consecutively numbered (see page 4).

b. Use your vehicle odometer to check mileage so that all stations on each line are located 3/10 mile apart.

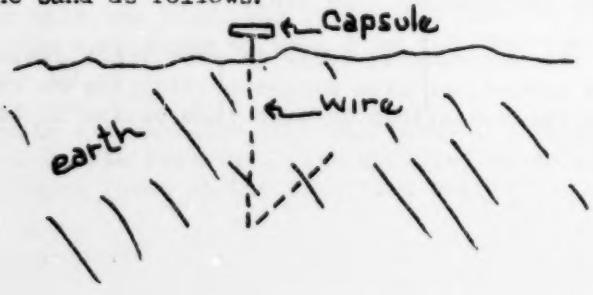
c. Stations should be alternated on either side of the road as you place out your lines. Station 1 will be on the left side, station 2 on the right, station 3 on the left, etc.

d. You may wish to make a larger sifter than normally used for setting traps since a 3-foot circle requires considerable sifting. A wooden frame approximately 16" x 24" with 1/8" hardware cloth (wire) works well. Where fine, dry dust is available, a piece of window screen cut to fit inside the frame of the sifter and supported by the hardware cloth will sift ideal powder-dust for reading tracks. Cover the station site with about 1/4" of the sifted earth. A whisk broom or foxtail brush is handy for smoothing over the station after reading tracks each day. A 3-foot circle made of garden hose or stiff wire will come in handy for making stations.

e. In some areas, it will be difficult or impossible to find suitable earth at all scent station sites. If necessary, it will be easier to load a quantity of earth in the back of your pickup and use this for preparation of the site. Best results are obtained with fine dust, about the consistency of flour. Be sure no grease or oil, etc., is present on the bed of your truck, or else place the required amount of earth in clean cardboard boxes. In some cases, you will find it necessary to use a shovel or hoe to "scalp" off or remove the grass, vegetation, etc., from some of the station sites.

f. After sifting over the required amount of earth, push the capsule containing the attractant on its supporting stick into the center of the circle so that the capsule is about 1/2" above ground level (see attached illustration). Where the ground is hard, a screwdriver or other pointed tool can be used to make a hole for the stick supporting the capsule.

g. Ravens may cause a problem in a few areas by removing and carrying off capsules. This problem may be handled in several ways depending upon local soil conditions. If soft soil or sand is present along your lines, you can drive a wooden stake into the middle of the scent post until level with the ground and then tack the capsule to the stake by means of a small nail. Last year several men solved the problem of capsules being pulled up in loose sand by pushing a bent length of bailing wire down through the top of the capsule, bending a "V" in the wire and inserting it into the sand as follows:



If the soil is rocky or hard, a large box nail or finishing nail can be driven through the top of the capsule directly into the ground after soil has been sifted over the site. Whether or not the above procedure will be necessary is left up to you.

4. Attractant and capsules

   a. The attractant you will use is the same as last year's. DON'T alter or change it in any way. It will not lose its drawing power for at least 6 days.

   b. Keep the attractant sealed in the jar and store in a cool, dry location until used. Do not prepare (fill) the capsules with the attractant more than 2 days prior to field use.

   c. Prepare the capsules for field use exactly like the sample capsule provided. Place one of the round gummed labels provided inside the bottom of each capsule to prevent leakage of the attractant. COMPLETELY FILL THE CAPSULES WITH ATTRACTANT. Do not pack the attractant, rather fill the capsule loosely. Place a piece of tape over the holes in the lid of the filled capsule to prevent leakage until it is placed in the field. Store capsules in a tight container and keep cool. Fill all capsules, place tape over lids, and NUMBER before starting to set out the line. This will reduce the chance of errors in numbering your stations. The attached illustration shows a good method of numbering and taping.

   d. When making a scent station, insert a sharpened support stick through one of the holes in the bottom of the capsule. REMOVE THE TAPE FROM THE TOP OF THE CAPSULE, NUMBER THE CAPSULE (if you haven't already done so) WITH A SOFT PENCIL (ink may fade), and place the capsule in the center of the 3-foot circle of sifted earth. Leave about 1/2" of space between the bottom of the capsule and the sifted earth. This will help to prevent clogging of the holes in the event of windy conditions.

   e. When running your scent post lines, REPLACE DAILY ANY CAPSULES THAT HAVE BEEN CARRIED OFF BY ANIMALS, DESTROYED, OR WHERE THE HOLES ARE CLOGGED WITH DIRT.

   f. Many of the men running lines in past years drove wooden stakes into the ground, or tied pieces of flagging on vegetation OPPOSITE their stations to make them easier to locate.

g. Smooth over daily all stations that have been tracked up. Generally, there is no need to smooth over stations tracked up by rodents, as coyotes or other predator tracks can be identified whether rodent tracks are present or not.

h. On the last day of the survey, pull up all capsules for disposal. DO NOT LEAVE CAPSULES IN THE FIELD AT THE END OF THE SURVEY. Do not return these or unused scent to Logan--either bury them or discard them with your household trash.

5. Wipe outs (bad weather)

We hope that all survey lines can be run for 4 consecutive days. However, bad weather will sometimes make this impossible. The lines must be run for at least 3 good days (visible tracks) in order for us to obtain useful information. If you run your line for 1 or 2 days and then one day of rain or wind makes it impossible to check the line, or wipes out all or most of the stations, try to re-set and continue to run the line until you get a total of at least 3 good days (preferably 4). However, if you have 2 or more days of bad weather during which it is impossible to identify tracks, it may be best to forget about any further attempts. In this case, however, complete a daily form for each day and write across the face of the report why you were unable to run the line that day. After a period of rain or wind it is usually necessary to re-set the line by sifting dust again and refilling the capsules (rain may cake the bait, high winds may blow it out of the capsules). Some predator tracks made during a period of rain or wind when you did not run the line may still be visible, but do not record these on the first day of checking following a day when you did not run the line because there is no way of knowing which night they were made and this causes a false index when the data are analyzed. Instead, count that day a loss, brush over tracks or resift dust if necessary, and replece capsules with new ones containing fresh bait if necessary.

6. Completing the data forms

a. Each box marked (2) on the outside is a "double kit" and contains the items needed to run two census lines. Normally, one man will run two lines. However, in the event two men each run only one line, the items will have to be evenly divided (in some cases we have done this for you and marked the boxes (1)).

b. Each double kit contains 10 blank forms (2 extras). Two completed sample forms are also enclosed as an example of how the blank forms should be filled out.

c. Complete the information required at the top of all sheets, including the scent-station line name. If you are not sure of the correct name, check with your supervisor. Do not use numbers as in previous years. Record the county in which your line is located (not the county in which you live or work), and if the line crosses a county line, give the names of both counties, with the county having the most stations written in first, regardless which county the line starts in.

d. Notice that an "area information sheet" is provided for each line. This should be filled out and returned each year, even if nothing has changed since you first filled out the sheet. The county space on this sheet is also for the line location, not for your county of residence or responsibility.

e. Notice that the blank forms are numbered from 1 to 50. Also, that after each number is the letter "L" or "R." The "L" indicates that the station is to be located on the left side of the road; the "R" means you should put the station on the right-hand side. These stations must be numbered starting at the same end of the line each year. If you are running a line run by others in the past, and do not know for sure which end of the line is which, don't guess--check with your supervisor or the man that ran the line last year. It is okay to run the line backward if this is more convenient (just don't number the stations backward), in which case you will be recording "50R" first and "1L" last. Also, if you run a line backward, be sure to make note of this by writing "run backward" at the bottom margin of the form each day this is done.

f. Complete the weather information at the top of each sheet. These are the predominant weather conditions DURING THE PREVIOUS NIGHT.

g. Be sure to indicate animal visits, if any, for all operable stations each day and record which stations were inoperable. If, for example, stations 23 to 34 were blown out or rained out on a given day, indicate this on the form with a "1" entered under station condition.

h. Whenever possible, indicate the species of animal that visited a station. For example, state "red fox," "grey fox," or "kit fox." Don't just state "fox" unless you cannot determine the species on the basis of tracks present. If you are sure that only one species of fox (or other group) occurs in your area, use the specific name. It is not desirable to record non-carnivore visits (birds, rodents,

deer, etc.), although animals that are infrequent or otherwise of special interest should be recorded (eagle, javelina, armadillo, etc.).

i. Never record a coyote or other predator visit for a station regarded by you as inoperable ("1" in station condition column); normally, if you can identify a track, the station should be regarded as operable whether or not the capsule is present. This is because (1) predators may be attracted even with the capsule gone because of lingering scent or just the presence of a disturbed site, and (2) tracks present may have been made before the capsule was carried off or chewed up at the station. In some cases (such as after a rain or wind) you may barely be able to identify a predator track; in such cases, record the species and mark the station as operable. If a non-predator track or unidentifiable track is present at an otherwise washed out, blown out, run over, or trampled station, record the station as inoperable and don't record the track.

j. DON'T GUESS on track identification. If the track is not clear due to blowing sand, etc., indicate "unidentified animal," "coyote?" but do not record "1" for coyote visit. "1" is used only when you are reasonably certain of a coyote track.

k. Regardless of the number or size of the coyote tracks present at a station on any one day, record them as one (single) visit.

l. Record only tracks located inside the 3-foot circle. Coyotes sometimes come close without entering the circle, but for the sake of uniformity it is necessary to record only those that enter the circle.

m. We have found a significant difference between the numbers of visits recorded on left and right sides of the roads, and a big jump in visits on the last day of the survey. After much head-scratching we think this means the left-hand (driver's side) stations are sometimes being read from inside the vehicle on all but the last day and that predator visits are being overlooked because of this. Therefore, please, get out of your rig even for the left-side stations. It is a good idea to circle each station (even those that appear unvisited at first) because sometimes tracks not visible because of lighting angle on one side will show up clearly from another direction. The value of this survey is largely dependent on the amount of effort we put into it.

7. Return of materials, forms, etc.

a. After the survey, discard or bury the used capsules and any remaining scent. Do not leave them in the field, do not return them to Pocatello, and please do not use the left-over scent for other purposes.

b. Save the box your supplies came in and, immediately after the survey, tie up all UNUSED materials (except the scent) in the large plastic bag provided, place this in the box, and send the box to Pocatello, using the franked address label enclosed. In the event the kit is divided between two men in different locations, a second franked address label is enclosed but one man will have to find another box for returning unused materials.

c. Send the completed forms and area information sheet to your state supervisor within a week after completion of the survey (franked envelope enclosed). Do not send the forms directly to Pocatello. Your state office will forward them after making copies for their files.

8. Questions

If you have any questions, contact your supervisor.

9. Material in each kit

Each kit contains sufficient supplies for two lines (exceptions are marked with (1) on outside of box), as follows:

a. Two 1-pint jars, each containing 125 grams of attractant.

b. Two bags of capsules, each containing 125 capsules (50 for setting up each line, 75 extra as replacements for those carried off or destroyed).

c. Two bundles of 125 support sticks for capsules.

d. Two stapled packets of 135 gummed stickers for bottom of capsules.

e. One completed sample capsules.

f. Ten blank daily forms (2 extra), 4 for each line, for recording animal visits.

g. One large plastic bags and two franked, gummed address labels for returning unused capsules, tape, stickers, and support sticks to Pocatello after completion of survey.

h. One manila envelopes for sending completed forms to state supervisor.

i. One roll of tape for sealing holes in capsule lids (see attached illustration) in preparation for setting lines.

State UTAH County CACHE Line Name EAGLE BUTTE Date SEPT 9, 1976

Observer I. C. PLENTY

Weather conditions last night (circle one):
(1) Clear (3) Showers (5) Snow
(2) (Cloudy) (no rain) (4) Rain

Wind (circle one):
(1) No wind (3) Moderate
(2) (Gusty) (4) Strong

Nighttime temperature (circle one):
Hot (80°F or above) (Moderate) (33°F to 70°F) Freezing or below (32°F or lower)

Scent station number	Station condition	Coyote visit	Other animals visiting station	Scent station number	Station condition	Coyote visit	Other animals visiting station
1 (L)	—	—	—	26 (R)	—	—	—
2 (R)	—	—	—	27 (L)	—	—	skunk, coon
3 (L)	—	/	—	28 (R)	—	—	coon unidentified
4 (R)	/	—	run over by grader	29 (L)	—	—	—
5 (L)	/	—	run over by grader	30 (R)	—	—	—
6 (R)	—	/	capsule carried off by coyote	31 (L)	—	—	—
7 (L)	—	—	—	32 (R)	—	—	—
8 (R)	—	—	—	33 (L)	—	—	cow chewed capsule
9 (L)	—	—	—	34 (R)	—	—	man took capsule
10 (R)	—	—	—	35 (L)	—	/	—
11 (L)	—	—	—	36 (R)	—	—	—
12 (R)	—	—	—	37 (L)	—	—	—
13 (L)	—	—	coon	38 (R)	—	—	—
14 (R)	—	/	coon	39 (L)	—	—	—
15 (L)	—	—	—	40 (R)	—	—	—
16 (R)	—	—	—	41 (L)	—	/	unidentified
17 (L)	—	—	—	42 (R)	—	/	skunk
18 (R)	—	—	—	43 (L)	—	—	—
19 (L)	—	—	—	44 (R)	—	—	—
20 (R)	—	—	—	45 (L)	—	—	—
21 (L)	—	/	—	46 (R)	—	—	—
22 (R)	—	—	—	47 (L)	/	—	blown out
23 (L)	—	/	—	48 (R)	/	—	blown out
24 (R)	/	—	cow trampled	49 (L)	/	—	blown out
25 (L)	—	—	—	50 (R)	/	—	blown out

SAMPLE

SAMPLE REPORT FORM

This sample form will help you in filling out your daily predator survey report forms. Study the examples on the other side before starting the survey.

The examples shown are explained below:

Scent Station Number	Explanation
1 and 2	The first two stations were in operating condition. No animals visited these two stations the previous night
3	Coyote tracks were found on this station
4 and 5	The station was destroyed (by grader); even if tracks had been present, the grader wiped them out
6	Capsule was carried off by a predator (a coyote)
7 to 12	No visits; stations in operating condition
13	Raccoon tracks found at station
14	Both coyote and raccoon tracks at station
15 to 20	No visits; station in operating condition
21	Coyote tracks found at station
22	No visits; station in operating condition
23	Coyote tracks found at station
24	A cow trampled the station to the extent that predator tracks, if present, could not be detected
25 and 26	No visits: station in operating condition
27	Both skunk and raccoon tracks at station
28	Raccoon and unidentified tracks at station
29 to 32	No visits, station in operating condition
33	Cow visited station and chewed capsule but did not trample station extensively; therefore station still in operating condition
34	Man took capsule, station still in operating condition (predator tracks, if present, would have been visible)
35	Coyote tracks found at station
36 to 40	No visits; station in operating condition
41	Coyote tracks and unidientified tracks found at station
42	Coyote and skunk tracks found at station
43 to 46	No visits; station in operating condition
47 to 50	These stations inoperative (blown out by wind)

Figure 1. Preparing a scent post station. In this example, a length of rubber hose was used to outline the station site. A 3-foot diameter circle of heavy wire is also helpful. The tendency is for trappers to make the circle smaller than required.

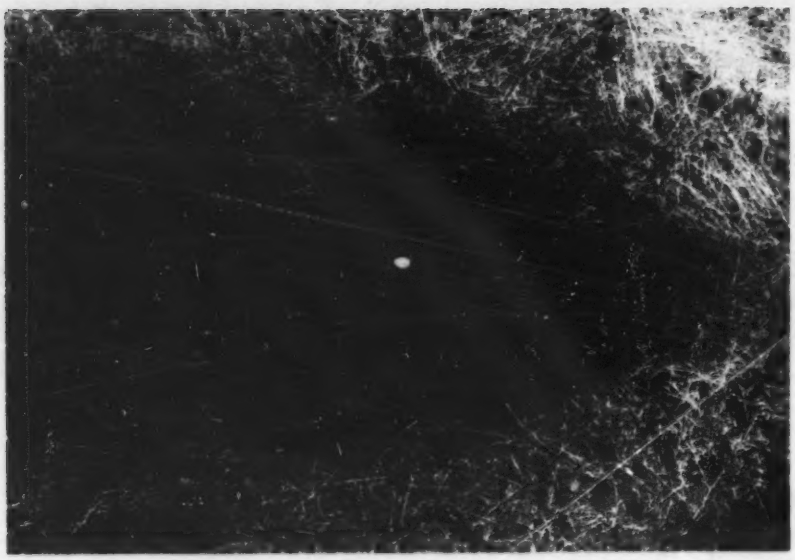
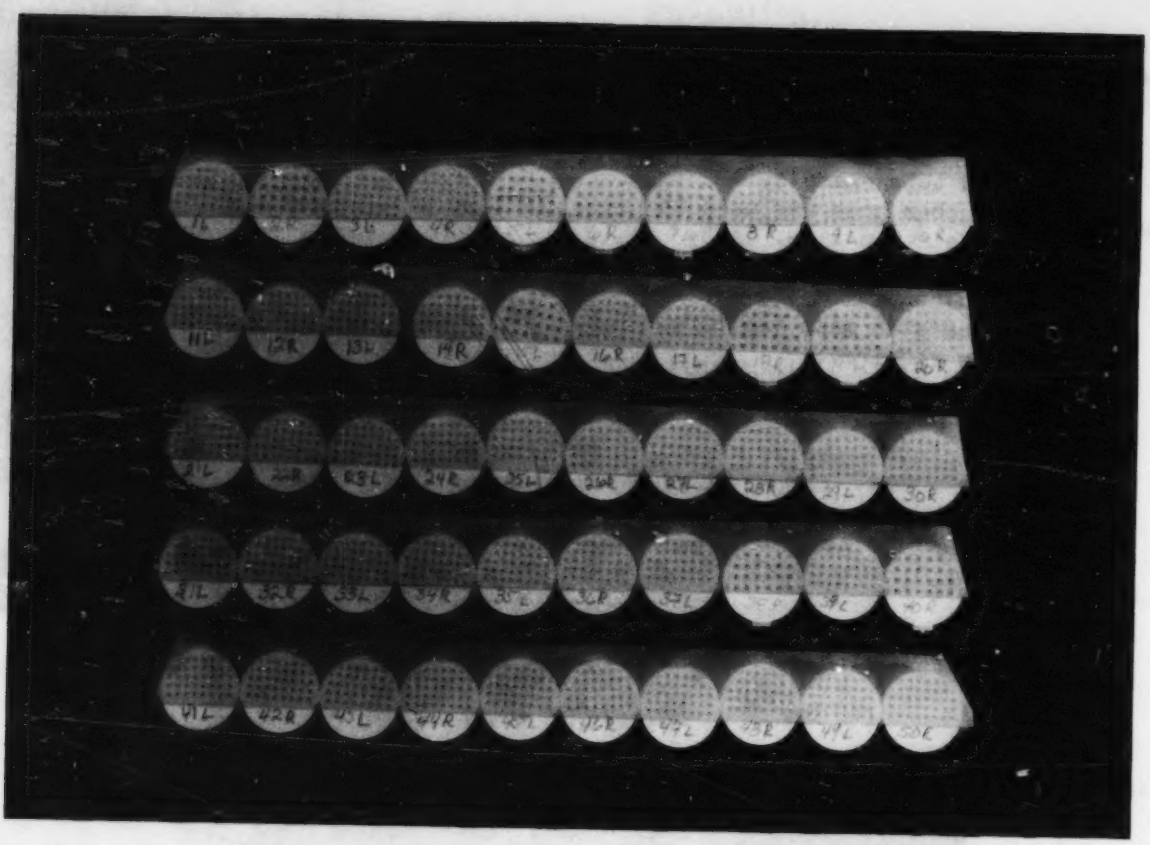


Figure 2. A completed scent station. Notice that the capsule is approximately one-half inch above the surface of the sifted earth.



The photograph above shows a good method of numbering and taping the scent capsules prior to setting out your predator survey line. Capsules can be "peeled" off the tape as you make each scent station, thereby making it almost impossible to misnumber the stations.

1979 AREA INFORMATION FOR PREDATOR SURVEY LINE

Observer_____ County and State_____

Line Name_____ Dates Survey Run_____

I. LAND SURFACE (enter number): Primary_____ Secondary_____

1. Flat
2. Irregular or rolling
3. Sand dunes or sand hills
4. Hilly, foothills, buttes, mesas
5. Mountains
6. Canyon lands
7. Badlands, river breaks
8. River or stream bottoms
9. Shorelines (lakes, ocean)
10. Other_____

II. LAND USE (enter number): Primary_____ Secondary_____

1. Livestock grazing
2. Farming
3. Timber production, timbered national forests
4. Military
5. Mining
6. National refuge, national park, national grassland
7. Other_____

III. VEGETATION (enter number): Primary_____ Secondary_____

1. Conifer forest
2. Broadleaf or deciduous forest
3. Mixed conifer and broadleaf forest
4. Shrubs
5. Grasslands
6. Mixed forest and grasslands
7. Mixed shrubs and grasslands
8. Marsh
9. Agricultural croplands
10. Mixed agric. cropland and conifer forest
11. Mixed agric. cropland and broadleaf forest
12. Mixed agric. croplands and shrubs
13. Mixed agric. croplands and grasslands
14. Other_____

IV. COYOTE CONTROL

Degree of coyote population reduction achieved from July to June

(circle one): 1. none 2. poor 3. moderate 4. good

Degree of coyote damage suppression achieved from July to June

(circle one): 1. none 2. poor 3. moderate 4. good

Instructions

Complete one of these forms for each predator survey line. Fill in your name, county, state, line number, and inclusive dates you checked your survey line.

I. LAND SURFACE

This information refers to the land features or surface of the land in the general vicinity of your 15-mile survey line--whether it is flat, hilly, mountainous, etc. By general vicinity, we mean the land surface approximately 3 miles on either side and along the entire length of your survey line. It does not refer to the vegetation present. Select the appropriate category describing the primary land surface in the general vicinity of your line and enter the category number in the space provided. If a secondary (less prevalent) land surface category is also present, indicate the appropriate category number in the space provided. If none of the categories apply to your line, briefly describe as best you can after the category "Other."

II. LAND USE

This refers to the primary and secondary uses of the land in the general vicinity of your survey line. Indicate, by number, how the land is used. If none of the categories apply, indicate the type of use in the "Other" category.

III. VEGETATION

This refers to the primary and secondary predominant classes of vegetation in the general vicinity of your line (approximately 3 miles on either side and along its entire length). As an example, the major portion of your line may run through grasslands. You would therefore place the number 2 in the "Primary" space. However, in one or two places, the line runs through some pine forest (conifer forest). You would therefore enter the number 1 in the "Secondary" space provided.

Under some circumstances, none of the land surface, land use, or vegetation categories will fit conditions along some of the survey lines. When this is the situation, the "Other" category should be used.

IV. COYOTE CONTROL

Under this heading, you should estimate what, in your opinion, is the single best or most appropriate category. Again, consider the amount of coyote reduction or damage suppression in the general vicinity of your line during the period July through June Take into account control work carried out by stockmen as well as by government agencies.

By "coyote population reduction", we mean the extent or degree to which overall coyote numbers have been reduced in the general vicinity of your line. "Degree of coyote damage suppression" means to what extent stock killing has been affected by predator control activities during the period July through June.

If you have any questions concerning this questionnaire, ask your supervisor for help in filling it out.

Return this form, along with your five daily report forms, to your supervisor.

State _____ County _____ Line Name _____ Date _____, 197

Observer _____

Weather conditions last night (circle one):
(1) Clear (3) Showers (5) Snow
(2) Cloudy (no rain) (4) Rain

Wind (circle one):
(1) No wind (3) Moderate
(2) Gusty (4) Strong

Nighttime temperature (circle one):
Hot (80°F or above) Moderate (33°F to 70°F) Freezing or below (32°F or lower)

Scent station number	Station condition	Coyote visit	Other animals visiting station	Scent station number	Station condition	Coyote visit	Other animals visiting station
1 (L)				26 (R)			
2 (R)				27 (L)			
3 (L)				28 (R)			
4 (R)				29 (L)			
5 (L)				30 (R)			
6 (R)				31 (L)			
7 (L)				32 (R)			
8 (R)				33 (L)			
9 (L)				34 (R)			
10 (R)				35 (L)			
11 (L)				36 (R)			
12 (R)				37 (L)			
13 (L)				38 (R)			
14 (R)				39 (L)			
15 (L)				40 (R)			
16 (R)				41 (L)			
17 (L)				42 (R)			
18 (R)				43 (L)			
19 (L)				44 (R)			
20 (R)				45 (L)			
21 (L)				46 (R)			
22 (R)				47 (L)			
23 (L)				48 (R)			
24 (R)				49 (L)			
25 (L)				50 (R)			

STATION CONDITION (Column two)

Enter either "-" or "1"
in column 2

- = Station in operating condition, tracks can be read, capsule may be present or absent

1 = Station inoperable, no possible way to read tracks (due to poor weather conditions, trampled by cows, run over by vehicle, etc.)

COYOTE VISIT (Column three)

Enter either "-" or "1"
in column 3

- = No coyote tracks at station

1 = Definite coyote tracks at station; if tracking conditions poor and there are tracks you cannot be sure are coyote, do not count them

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